

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Methods: 148

Sample # 181211

Statistical Summary

Labs Reporting: 101

Grade 11-11-21

Issue Date : 01/31/2019

Method Code	Analyte & Method Sample # 181211	# 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
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	11	11	6.919	0.2423	6.908		0.2346	0.0884	3.40%		0.0943	2.99%
001.99	Ammoniacal Nitrogen, Other (%)	28	27	7.006	0.6320	7.051		0.3041	0.0732	4.31%		0.0598	2.98%
002.10	Nitrate Nitrogen, Robertson (%)	1		3.900									
002.20	Nitrate Nitrogen, Jones Modified (%)	1		6.655									
002.99	Nitrate Nitrogen, Other (%)	24	24	4.406	0.4761	4.324		0.2313	0.0590	5.35%		0.1053	3.21%
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	5	5	11.13	0.0965	11.13		0.0965	0.0539	0.87%		0.1440	2.78%
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	2	2	11.32	0.1626								
010.11	Total Nitrogen, Modified Comprehensive (11%)	6	6	11.19	0.4292	11.20	0.5980	0.2771	0.1414	2.47%	1.08	0.0814	2.78%
010.12	Total Nitrogen, Salicylic (11%)	3	3	11.17	0.3773	11.17	0.5976	0.3773	0.2723	3.38%	1.47	0.0874	2.78%
010.60	Total Nitrogen, Combustion (11%)	61	59	11.30	0.1345	11.29	0.5994	0.1083	0.0176	0.96%	0.42	0.0837	2.78%
010.99	Total Nitrogen, Other (11%)	13	13	11.16	0.2721	11.16	0.5974	0.2322	0.0805	2.08%	0.91	0.0864	2.78%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ..	3	3	11.05	0.3396	11.05		0.3396	0.2451	3.07%		0.2200	2.79%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb	20	19	10.83	0.1956	10.84		0.1967	0.0564	1.81%		0.1634	2.79%
020.40	Total Phosphorus as P2O5, Automated (%)	1		10.49									
020.50	Total Phosphorus as P2O5, ICP (%)	25	24	10.79	0.5547	10.77		0.5204	0.1328	4.83%		0.2353	2.80%
020.99	Total Phosphorus as P2O5, Other (%)	4	4	10.40	2.011	10.40		2.011	1.257	19.34%		0.2237	2.81%
030.40	Citrate Insoluble Phosphorus as P2O5, Automated, t...	1		0.2400									
040.20	Indirect Available Phosphorus as P2O5, Spectrophot...	2	2	10.79	0.0601								
040.40	Indirect Available Phosphorus as P2O5, Automated (1	1		10.25									
040.99	Indirect Available Phosphorus as P2O5, Other (11%)	1		10.76									
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q..	4	4	10.58	0.1709	10.58	0.6900	0.1709	0.1068	1.61%	0.58	0.1297	2.80%
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q..	6	6	10.63	0.1365	10.62	0.6900	0.1256	0.0641	1.18%	0.42	0.0884	2.80%
041.20	Direct Available Phosphorus as P2O5, Spectrophotom	1		10.16									
041.21	Direct Available Phosphorus as P2O5, Spectrophotom	2	2	10.64	0.2227								
041.40	Direct Available Phosphorus as P2O5, Automated (11'	1		10.13									
041.50	Direct Available Phosphorus as P2O5, ICP (11%)	3	3	10.76	0.1651	10.76	0.6900	0.1651	0.1192	1.53%	0.56	0.3167	2.80%
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-... (	12	12	10.48	0.7875	10.72	0.6900	0.2678	0.0966	2.50%	0.90	0.0566	2.80%
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ..	12	12	10.41	0.6677	10.53	0.6900	0.4267	0.1540	4.05%	1.44	0.0512	2.81%
041.99	Direct Available Phosphorus as P2O5, Other (11%)	10	10	11.08	0.4282	11.01	0.6900	0.2681	0.1060	2.44%	0.91	0.1000	2.79%
048.20	Water Soluble Phosphorus as P2O5, Spectrophotome	2	2	8.394	0.4579								
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	1		8.265									

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048.50	Water Soluble Phosphorus as P2O5, ICP (%)	1		9.128									
048.99	Water Soluble Phosphorus as P2O5, Other (%)	1		8.660									
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	10	9	21.75	0.4744	21.79	1.1427	0.4460	0.1858	2.05%	0.91	0.1078	2.52%
050.30	Soluble Potassium as K2O, AA (Oxalate) (21%)	5	5	22.66	1.673	22.66	1.1699	1.673	0.9355	7.38%	3.33	0.4040	2.50%
050.31	Soluble Potassium as K2O, AA (Citrate) (21%)	1		21.55									
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (21%)	1		21.23									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (21%)	9	8	21.55	1.413	21.73	1.1405	1.137	0.5026	5.23%	2.32	0.3197	2.52%
050.51	Soluble Potassium as K2O, ICP (Citrate) (21%)	5	5	22.57	1.380	22.57	1.1670	1.380	0.7717	6.12%	2.76	0.2420	2.50%
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	11	11	21.14	1.677	21.39	1.1285	1.219	0.4595	5.70%	2.52	0.2433	2.52%
050.60	Soluble Potassium as K2O, Flame Photometric (Oxala	6	6	21.17	0.7549	21.17	1.1209	0.8560	0.4368	4.04%	1.78	0.1306	2.53%
050.62	Soluble Potassium as K2O, Flame Photometric (Citra..	5	5	21.84	0.2579	21.84	1.1444	0.2579	0.1442	1.18%	0.53	0.1820	2.51%
050.99	Soluble Potassium as K2O, Other (21%)	37	36	21.52	0.9123	21.62	1.1367	0.6870	0.1431	3.18%	1.41	0.3090	2.52%
060.00	Water (Free), Vacuum Oven (%)	1		0.6550									
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours,...	2	2	0.8125	0.1450								
060.99	Water (Free), Other (%)	2	2	0.4234	0.1939								
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	2	2	0.7415	0.8294								
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (%)	7	7	1.432	0.1730	1.418	0.2709	0.1629	0.0770	11.49%	1.40	0.0643	3.79%
101.32	Acid Soluble Calcium, ICP, test portion 2006.03A-C (%)	2	2	1.360	0.0209								
101.33	Acid Soluble Calcium, ICP, 2017.02 (%)	3	3	1.383	0.0737	1.383	0.2691	0.0736	0.0531	5.33%	0.64	0.0332	3.81%
101.99	Acid Soluble Calcium, Other (%)	2	2	1.547	0.1439								
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (1.5%)	10	10	1.712	0.3052	1.650	0.2825	0.1650	0.0652	10.00%	1.36	0.0492	3.71%
121.03	Acid Soluble Magnesium, AA, 965.09, test portion 2...	1		1.544									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (	19	19	1.555	0.1487	1.562	0.2781	0.1443	0.0414	9.23%	1.21	0.0522	3.74%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A...	4	4	1.539	0.0407	1.539	0.2769	0.0407	0.0255	2.65%	0.34	0.0147	3.75%
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	10	9	1.545	0.0816	1.545	0.2773	0.0926	0.0386	5.99%	0.78	0.0222	3.75%
121.99	Acid Soluble Magnesium, Other (1.5%)	15	15	1.682	0.5622	1.578	0.2789	0.1690	0.0545	10.71%	1.41	0.0341	3.73%
131.00	Water Soluble Magnesium, AA (%)	3	3	1.449	0.8122	1.449		0.8122	0.5861	56.04%		0.1403	3.78%
131.30	Water Soluble Magnesium, ICP (%)	6	6	1.107	0.3909	1.107		0.4433	0.2262	40.06%		0.0885	3.94%
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	2	2	1.769	1.285								
131.99	Water Soluble Magnesium, Other (%)	3	3	1.938	0.7629	1.938		0.7629	0.5506	39.36%		0.0367	3.62%
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon disu... (%)	1		0.1050									
143.99	Elemental Sulfur, Other (%)	6	6	10.50	0.8222	10.50		0.9323	0.4758	8.88%		0.0817	2.81%
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulfur - ... (%)	11	10	10.68	0.6644	10.77		0.2362	0.0934	2.19%		0.0883	2.80%
145.99	Sulfate Sulfur, HCl soluble, Other (%)	2	2	10.04	0.4561								
148.00	Total Sulfur, Combustion (10%)	6	6	10.93	0.4836	10.93	0.7465	0.5484	0.2799	5.02%	1.71	0.1183	2.79%
148.01	Total Sulfur, Gravimetric - sulfate and elemental...	10	10	10.88	0.1813	10.86	0.7431	0.1761	0.0696	1.62%	0.55	0.1200	2.79%
148.07	Total Sulfur, ICP, test portion as in 2017.02 (10%)	17	17	10.51	0.9315	10.69	0.7343	0.3893	0.1180	3.64%	1.24	0.3012	2.80%
148.99	Total Sulfur, Other (10%)	15	15	10.75	0.7979	10.73	0.7366	0.7824	0.2525	7.29%	2.47	0.2726	2.80%
149.02	Sulfur - HNO3 soluble, Turbidimetric, modification... (%)	1		9.710									
149.04	Sulfur - HNO3 soluble, ICP (%)	2	2	11.18	1.039								
151.00	Acid Soluble Arsenic , AA, test portion 2006.03 m... (p	1		0.9750									
151.30	Acid Soluble Arsenic , ICP (ppm)	5	5	1.832	0.7757	1.832		0.7757	0.4336	42.34%		0.0628	14.60%

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151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	2	2	3.960	2.788								
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	2	2	1.122	0.7100								
151.99	Acid Soluble Arsenic , Other (ppm)	5	5	0.9378	0.4305	0.9378		0.4305	0.2407	45.91%		0.0883	16.15%
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	12	12	0.0477	0.0040	0.0479	0.0102	0.0041	0.0015	8.58%	0.94	0.0015	6.32%
165.30	Acid Soluble Boron , ICP, test portion in 982.01 ... (0.0	13	13	0.0473	0.0028	0.0476	0.0101	0.0021	0.0007	4.45%	0.49	0.0012	6.33%
165.99	Acid Soluble Boron , Other (0.05%)	21	19	0.0468	0.0062	0.0472	0.0101	0.0058	0.0017	12.36%	1.35	0.0008	6.33%
171.00	Water Soluble Boron , AA, JAOAC 52.950 (%)	1		0.0475									
171.10	Water Soluble Boron , Spectrophotometric (%)	2	2	0.0475	0.0014								
171.99	Water Soluble Boron , Other (%)	2	2	0.0448	0.0010								
181.00	Acid Soluble Cadmium , AA, test portion 2006.03 m...	2	2	0.1297	0.0641								
181.30	Acid Soluble Cadmium , ICP (ppm)	7	6	0.2514	0.3881	0.1057		0.0415	0.0212	39.28%		0.0048	22.44%
181.33	Acid Soluble Cadmium , ICP, 2017.02 (ppm)	2	2	2.482	3.304								
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	2	0	0.0000									
181.99	Acid Soluble Cadmium , Other (ppm)	5	4	0.1779	0.1594	0.1779		0.1594	0.0996	89.62%		0.0083	20.74%
191.00	Acid Soluble Chromium , AA, test portion 2006.03 ... (	2	2	5.005	1.916								
191.30	Acid Soluble Chromium , ICP (ppm)	8	8	11.53	3.070	11.25		2.812	1.243	24.99%		0.7589	11.11%
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	3	3	14.02	2.893	14.02		2.893	2.088	20.64%		1.821	10.75%
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	2	2	13.89	1.604								
191.99	Acid Soluble Chromium , Other (ppm)	6	5	9.203	6.709	9.203		6.709	3.750	72.90%		0.0448	11.45%
202.30	Acid Soluble Cobalt , ICP (ppm)	5	5	1.662	0.4354	1.662	1.4985	0.4354	0.2434	26.20%	0.68	0.1379	14.82%
202.32	Acid Soluble Cobalt , ICP, 2006.03 (ppm)	1		1.865									
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	3	3	3.179	1.306	3.179	1.9536	1.306	0.9422	41.07%	1.56	1.319	13.44%
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	3	3	2.444	0.2831	2.444	1.7333	0.2831	0.2043	11.58%	0.38	0.3061	13.98%
202.99	Acid Soluble Cobalt , Other (ppm)	6	6	1.851	0.3509	1.851	1.5552	0.3979	0.2031	21.50%	0.60	0.1174	14.58%
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.05%)	11	10	0.0635	0.0833	0.0387	0.0089	0.0086	0.0034	22.32%	2.27	0.0026	6.52%
221.30	Acid Soluble Copper , ICP, test portion inorganic... (0.	18	17	0.0359	0.0037	0.0359	0.0086	0.0042	0.0013	11.65%	1.13	0.0030	6.60%
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-... (C	4	4	0.0355	0.0007	0.0355	0.0086	0.0007	0.0004	1.91%	0.18	0.0010	6.61%
221.33	Acid Soluble Copper , ICP, 2017.02 (0.05%)	7	7	0.0354	0.0030	0.0356	0.0086	0.0030	0.0014	8.48%	0.82	0.0008	6.61%
221.99	Acid Soluble Copper , Other (0.05%)	13	13	0.0352	0.0047	0.0350	0.0085	0.0049	0.0017	14.09%	1.35	0.0012	6.62%
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	10	10	0.1635	0.0912	0.1452	0.0195	0.0566	0.0224	38.96%	6.75	0.0084	5.35%
241.30	Acid Soluble Iron , ICP, test portion inorganic 96... (0.1	19	18	0.1361	0.0141	0.1368	0.0187	0.0125	0.0037	9.13%	1.56	0.0048	5.40%
241.32	Acid Soluble Iron , ICP, test portion 2006.03A-C ... (0.	4	4	0.1271	0.0183	0.1271	0.0177	0.0183	0.0114	14.37%	2.40	0.0019	5.46%
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	9	8	0.1321	0.0080	0.1316	0.0182	0.0078	0.0034	5.91%	1.00	0.0019	5.43%
241.99	Acid Soluble Iron , Other (0.1%)	13	13	0.1232	0.0186	0.1236	0.0174	0.0201	0.0070	16.29%	2.70	0.0031	5.48%
251.00	Acid Soluble Lead , AA, test portion 2006.03 modi... (f	2	2	0.7725	0.7389								
251.30	Acid Soluble Lead , ICP (ppm)	7	6	1.980	1.031	1.860		0.8759	0.4470	47.09%		0.0561	14.57%
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	2	2	2.769	1.768								
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	2	1	4.509									
251.99	Acid Soluble Lead , Other (ppm)	6	6	1.228	0.6093	1.374		0.3163	0.1614	23.02%		0.0434	15.25%
261.11	Acid Soluble Manganese , AA, total Mn (0.25%)	2	2	0.2548	0.0067								
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (0.25	8	8	0.2539	0.0304	0.2539	0.0304	0.0344	0.0152	13.55%	2.64	0.0108	4.92%
261.30	Acid Soluble Manganese , ICP, test portion 972.02... (9	9	0.2706	0.0169	0.2693	0.0319	0.0161	0.0067	5.98%	1.17	0.0136	4.87%

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261.31	Acid Soluble Manganese , ICP, test portion 972.02...	4	4	0.2801	0.0176	0.2801	0.0330	0.0176	0.0110	6.27%	1.24	0.0043	4.84%
261.32	Acid Soluble Manganese , ICP, test portion inorga...	7	7	0.2729	0.0140	0.2747	0.0325	0.0113	0.0053	4.10%	0.81	0.0107	4.86%
261.34	Acid Soluble Manganese , ICP, test portion 2006.0...	4	4	0.2624	0.0106	0.2624	0.0312	0.0106	0.0066	4.03%	0.79	0.0069	4.89%
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	9	8	0.2614	0.0135	0.2614	0.0311	0.0153	0.0068	5.86%	1.15	0.0034	4.89%
261.99	Acid Soluble Manganese , Other (0.25%)	14	13	0.2462	0.0294	0.2480	0.0298	0.0294	0.0102	11.84%	2.30	0.0075	4.93%
271.00	Water Soluble Manganese , AA (%)	1		0.2435									
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	1		0.1700									
281.00	Acid Soluble Mercury , AA (ppm)	2	2	0.0167	0.0231								
281.30	Acid Soluble Mercury , ICP (ppm)	3	2	0.0187	0.0018	0.0187		0.0018	0.0016	9.83%		0.0124	29.12%
281.99	Acid Soluble Mercury , Other (ppm)	1		0.0200									
289.00	Acid Soluble Molybdenum , AA, test portion 2006.0...	1		29.68									
289.30	Acid Soluble Molybdenum , ICP (20ppm)	9	9	39.57	11.07	38.16	12.4484	8.935	3.723	23.41%	1.67	4.625	9.25%
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (20ppm)	1		34.00									
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (20ppm)	7	6	37.34	5.625	37.34	12.2030	6.379	3.255	17.08%	1.22	0.4278	9.28%
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (:	2	2	41.08	1.993								
289.99	Acid Soluble Molybdenum , Other (20ppm)	5	5	33.85	11.81	33.85	11.1553	11.81	6.602	34.89%	2.47	2.594	9.42%
291.00	Acid Soluble Nickel , AA, test portion 2006.03 mo... (p	1		5.050									
291.30	Acid Soluble Nickel , ICP (ppm)	7	6	4.028	1.930	4.028		2.188	1.117	54.32%		0.2471	12.97%
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	3	3	8.262	1.604	8.262		1.604	1.158	19.42%		1.349	11.64%
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	2	2	7.164	0.2768								
291.99	Acid Soluble Nickel , Other (ppm)	6	5	6.036	2.007	6.036		2.007	1.122	33.26%		0.3690	12.20%
301.30	Acid Soluble Selenium , ICP (ppm)	3	3	1.389	1.201	1.389		1.201	0.8669	86.47%		0.8283	15.22%
301.33	Acid Soluble Selenium , ICP, 2017.02 (ppm)	2	2	4.183	3.327								
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppr	2	1	3.946									
301.99	Acid Soluble Selenium , Other (ppm)	4	4	2.771	3.245	2.771		3.245	2.028	117.08%		0.1185	13.72%
311.33	Sodium, ICP, test portion as in 2017.02 (%)	3	3	0.3650	0.0653	0.3650	0.0415	0.0653	0.0471	17.89%	3.67	0.0494	4.65%
311.99	Sodium, Other (%)	3	3	0.2867	0.0029	0.2867	0.0337	0.0029	0.0021	1.01%	0.20	0.0200	4.83%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	12	10	0.0419	0.0024	0.0419	0.0092	0.0025	0.0010	6.07%	0.64	0.0014	6.45%
321.30	Acid Soluble Zinc , ICP, test portion inorganic 9... (0.0	23	22	0.0429	0.0037	0.0429	0.0093	0.0038	0.0010	8.81%	0.95	0.0020	6.43%
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C ... (0.	4	4	0.0438	0.0017	0.0438	0.0094	0.0017	0.0011	3.97%	0.43	0.0007	6.41%
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	9	9	0.0419	0.0028	0.0419	0.0092	0.0031	0.0013	7.28%	0.77	0.0004	6.45%
321.99	Acid Soluble Zinc , Other (0.05%)	14	13	0.0421	0.0032	0.0423	0.0092	0.0031	0.0011	7.38%	0.79	0.0026	6.44%
325.30	Water Soluble Zinc , ICP (%)	1		0.0080									

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 # 181211

Grade 11-11-21

Method Precision Report

Issue Date : 01/31/2019

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility SR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	11	11	6.919	0.2423	0.2335	0.0913	0.2507	3.38%	1.32%	3.62%	2.745
001.99	Ammoniacal Nitrogen, Other (%)	28	25	7.128	0.3684	0.3668	0.0482	0.3700	5.15%	0.68%	5.19%	7.679
002.99	Nitrate Nitrogen, Other (%)	24	21	4.315	0.2608	0.2564	0.0674	0.2651	5.94%	1.56%	6.14%	3.932
010.60	Total Nitrogen, Combustion (11%)	61	56	11.29	0.1138	0.0998	0.0773	0.1263	0.88%	0.68%	1.12%	1.633
010.99	Total Nitrogen, Other (11%)	13	12	11.13	0.2705	0.2674	0.0580	0.2736	2.40%	0.52%	2.46%	4.720
020.20	Total Phosphorus as P2O5, Spectrophotometric MolybdovanadoP (%)	20	17	10.87	0.1540	0.1133	0.1476	0.1861	1.04%	1.36%	1.71%	1.261
020.50	Total Phosphorus as P2O5, ICP (%)	25	22	10.74	0.4692	0.4468	0.2029	0.4907	4.16%	1.89%	4.57%	2.419
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-EDTA Ext. (11%)	12	10	10.80	0.1585	0.1565	0.0361	0.1606	1.45%	0.33%	1.49%	4.444
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (11%)	12	11	10.58	0.3333	0.3311	0.0535	0.3354	3.13%	0.51%	3.17%	6.273
041.99	Direct Available Phosphorus as P2O5, Other (11%)	10	9	10.96	0.2140	0.2086	0.0675	0.2193	1.90%	0.62%	2.00%	3.249
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	10	8	21.84	0.4086	0.4063	0.0613	0.4109	1.86%	0.28%	1.88%	6.705
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	11	10	21.57	0.9357	0.9162	0.2687	0.9548	4.25%	1.25%	4.43%	3.554
050.99	Soluble Potassium as K2O, Other (21%)	37	35	21.64	0.6118	0.5776	0.2849	0.6441	2.67%	1.32%	2.98%	2.261
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (1.5%)	10	9	1.623	0.1237	0.1197	0.0440	0.1276	7.38%	2.71%	7.86%	2.899
121.30	Acid Soluble Magnesium, ICP, test portion inorganic 965.09 (1.5%)	19	18	1.575	0.1230	0.1188	0.0451	0.1271	7.54%	2.87%	8.07%	2.815
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	10	9	1.545	0.0816	0.0803	0.0208	0.0829	5.20%	1.35%	5.37%	3.979
121.99	Acid Soluble Magnesium, Other (1.5%)	15	14	1.543	0.1751	0.1736	0.0324	0.1766	11.25%	2.10%	11.44%	5.454
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulfur - sulfate form (%)	11	9	10.87	0.3213	0.3175	0.0696	0.3250	2.92%	0.64%	2.99%	4.672
148.01	Total Sulfur, Gravimetric - sulfate and elemental (10%)	10	9	10.90	0.1712	0.1631	0.0736	0.1789	1.50%	0.68%	1.64%	2.430
148.07	Total Sulfur, ICP, test portion as in 2017.02 (10%)	17	16	10.72	0.3671	0.3092	0.2800	0.4171	2.88%	2.61%	3.89%	1.490
148.99	Total Sulfur, Other (10%)	15	14	10.78	0.8220	0.8049	0.2362	0.8388	7.47%	2.19%	7.78%	3.551
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	12	12	0.0477	0.0040	0.0039	0.0013	0.0041	8.14%	2.81%	8.62%	3.063
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (0.05%)	13	11	0.0481	0.0017	0.0016	0.0010	0.0019	3.35%	1.98%	3.89%	1.962
165.99	Acid Soluble Boron , Other (0.05%)	21	17	0.0477	0.0051	0.0050	0.0008	0.0051	10.56%	1.60%	10.68%	6.696
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.05%)	11	9	0.0373	0.0065	0.0062	0.0025	0.0067	16.75%	6.57%	17.99%	2.737
221.30	Acid Soluble Copper , ICP, test portion inorganic 965.09 (0.05%)	18	16	0.0363	0.0035	0.0029	0.0026	0.0039	8.09%	7.24%	10.86%	1.500
221.99	Acid Soluble Copper , Other (0.05%)	13	12	0.0344	0.0039	0.0038	0.0010	0.0040	11.16%	3.01%	11.56%	3.835
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	10	9	0.1389	0.0504	0.0503	0.0052	0.0506	36.22%	3.77%	36.41%	9.657
241.30	Acid Soluble Iron , ICP, test portion inorganic 965.09 (0.1%)	19	17	0.1382	0.0109	0.0104	0.0050	0.0115	7.49%	3.59%	8.30%	2.314
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	9	8	0.1321	0.0080	0.0079	0.0018	0.0081	5.96%	1.35%	6.11%	4.541

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
241.99	Acid Soluble Iron , Other (0.1%)	13	13	0.1232	0.0186	0.0184	0.0034	0.0187	14.93%	2.74%	15.18%	5.544
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (0.25%)	9	8	0.2713	0.0179	0.0164	0.0103	0.0193	6.04%	3.78%	7.13%	1.885
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	9	8	0.2614	0.0135	0.0134	0.0030	0.0137	5.11%	1.13%	5.23%	4.610
261.99	Acid Soluble Manganese , Other (0.25%)	14	13	0.2462	0.0294	0.0291	0.0067	0.0298	11.80%	2.73%	12.11%	4.442
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	12	10	0.0419	0.0024	0.0022	0.0012	0.0026	5.34%	2.96%	6.11%	2.064
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09 (0.05%)	23	20	0.0431	0.0034	0.0033	0.0013	0.0035	7.59%	2.95%	8.14%	2.765
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	9	9	0.0419	0.0028	0.0027	0.0004	0.0028	6.55%	1.02%	6.63%	6.470
321.99	Acid Soluble Zinc , Other (0.05%)	14	12	0.0419	0.0032	0.0029	0.0018	0.0035	7.02%	4.40%	8.28%	1.881

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: 148

Sample # 181211

Lab Values

Labs Reporting: 101

Grade 11-11-21

Issue Date : 01/31/2019

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				
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0309	6.520	0.0400	6.908	0.2346	0.0943	11	-1.55	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0444	6.635	0.1900	6.908	0.2346	0.0943	11	-1.09	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0531	6.725	0.0500	6.908	0.2346	0.0943	11	-0.73	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0117	6.850	0.1000	6.908	0.2346	0.0943	11	-0.23	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0498	6.900	0.2000	6.908	0.2346	0.0943	11	-0.03	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0231	6.920	0.0000	6.908	0.2346	0.0943	11	0.05	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0486	6.990	0.0200	6.908	0.2346	0.0943	11	0.33	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0177	7.015	0.0174	6.908	0.2346	0.0943	11	0.43	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0451	7.065	0.0700	6.908	0.2346	0.0943	11	0.63	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0169	7.070	0.0600	6.908	0.2346	0.0943	11	0.65	NA	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0230	7.415	0.2900	6.908	0.2346	0.0943	11	2.02	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0549	4.450	0.1000	7.051	0.3041	0.0598	27	-8.55	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0520	6.530	0.2400	7.051	0.3041	0.0598	27	-1.71	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0532	6.580	0.0800	7.051	0.3041	0.0598	27	-1.55	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0519	6.620	0.0200	7.051	0.3041	0.0598	27	-1.42	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0531	6.735	0.0300	7.051	0.3041	0.0598	27	-1.04	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0537	6.750	0.1200	7.051	0.3041	0.0598	27	-0.99	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0481	6.920	0.1200	7.051	0.3041	0.0598	27	-0.43	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0545	6.970	0.0200	7.051	0.3041	0.0598	27	-0.27	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0027	6.977	0.1630	7.051	0.3041	0.0598	27	-0.25	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0368	6.992	0.0970	7.051	0.3041	0.0598	27	-0.20	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0476	7.028	0.0854	7.051	0.3041	0.0598	27	-0.08	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0544	7.035	0.0700	7.051	0.3041	0.0598	27	-0.05	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0394	7.060	0.0500	7.051	0.3041	0.0598	27	0.03	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0522	7.075	0.0100	7.051	0.3041	0.0598	27	0.08	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0371	7.120	0.0000	7.051	0.3041	0.0598	27	0.23	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0096	7.150	0.0000	7.051	0.3041	0.0598	27	0.32	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0423	7.155	0.0700	7.051	0.3041	0.0598	27	0.34	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0510	7.161	0.0036	7.051	0.3041	0.0598	27	0.36	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0405	7.170	0.0000	7.051	0.3041	0.0598	27	0.39	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0527	7.170	0.1000	7.051	0.3041	0.0598	27	0.39	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0513	7.175	0.0100	7.051	0.3041	0.0598	27	0.41	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0220	7.180	0.0400	7.051	0.3041	0.0598	27	0.42	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				
001.99	Ammoniacal Nitrogen, Other (%)	0550	7.350	0.0000	7.051	0.3041	0.0598	27	0.98	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0506	7.415	0.0100	7.051	0.3041	0.0598	27	1.20	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0524	7.437	0.0695	7.051	0.3041	0.0598	27	1.27	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0553	7.450	0.0770	7.051	0.3041	0.0598	27	1.31	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0540	8.515	0.0300	7.051	0.3041	0.0598	27	4.81	NA	0
001.99	Ammoniacal Nitrogen, Other (%)	0546	7.005	0.5900	7.051	0.3041	0.0598	27	-0.15	NA	1
002.10	Nitrate Nitrogen, Robertson (%)	0498	3.900	0.0000				1			0
002.20	Nitrate Nitrogen, Jones Modified (%)	0230	6.655	0.1100				1			0
002.99	Nitrate Nitrogen, Other (%)	0029	3.860	0.0800	4.324	0.2313	0.1053	24	-2.01	NA	0
002.99	Nitrate Nitrogen, Other (%)	0545	4.000	0.0400	4.324	0.2313	0.1053	24	-1.40	NA	0
002.99	Nitrate Nitrogen, Other (%)	0394	4.033	0.1370	4.324	0.2313	0.1053	24	-1.26	NA	0
002.99	Nitrate Nitrogen, Other (%)	0481	4.040	0.0000	4.324	0.2313	0.1053	24	-1.23	NA	0
002.99	Nitrate Nitrogen, Other (%)	0027	4.097	0.1470	4.324	0.2313	0.1053	24	-0.98	NA	0
002.99	Nitrate Nitrogen, Other (%)	0423	4.220	0.1000	4.324	0.2313	0.1053	24	-0.45	NA	0
002.99	Nitrate Nitrogen, Other (%)	0371	4.235	0.0300	4.324	0.2313	0.1053	24	-0.38	NA	0
002.99	Nitrate Nitrogen, Other (%)	0231	4.240	0.0600	4.324	0.2313	0.1053	24	-0.36	NA	0
002.99	Nitrate Nitrogen, Other (%)	0550	4.245	0.4700	4.324	0.2313	0.1053	24	-0.34	NA	0
002.99	Nitrate Nitrogen, Other (%)	0513	4.265	0.0300	4.324	0.2313	0.1053	24	-0.25	NA	0
002.99	Nitrate Nitrogen, Other (%)	0506	4.275	0.0300	4.324	0.2313	0.1053	24	-0.21	NA	0
002.99	Nitrate Nitrogen, Other (%)	0486	4.290	0.0200	4.324	0.2313	0.1053	24	-0.15	NA	0
002.99	Nitrate Nitrogen, Other (%)	0476	4.350	0.0066	4.324	0.2313	0.1053	24	0.11	NA	0
002.99	Nitrate Nitrogen, Other (%)	0537	4.365	0.2100	4.324	0.2313	0.1053	24	0.18	NA	0
002.99	Nitrate Nitrogen, Other (%)	0527	4.370	0.1000	4.324	0.2313	0.1053	24	0.20	NA	0
002.99	Nitrate Nitrogen, Other (%)	0553	4.396	0.0230	4.324	0.2313	0.1053	24	0.31	NA	0
002.99	Nitrate Nitrogen, Other (%)	0519	4.400	0.0200	4.324	0.2313	0.1053	24	0.33	NA	0
002.99	Nitrate Nitrogen, Other (%)	0368	4.468	0.1340	4.324	0.2313	0.1053	24	0.62	NA	0
002.99	Nitrate Nitrogen, Other (%)	0532	4.470	0.1000	4.324	0.2313	0.1053	24	0.63	NA	0
002.99	Nitrate Nitrogen, Other (%)	0531	4.525	0.0500	4.324	0.2313	0.1053	24	0.87	NA	0
002.99	Nitrate Nitrogen, Other (%)	0520	4.570	0.4400	4.324	0.2313	0.1053	24	1.06	NA	0
002.99	Nitrate Nitrogen, Other (%)	0518	4.600	0.2000	4.324	0.2313	0.1053	24	1.19	NA	0
002.99	Nitrate Nitrogen, Other (%)	0540	5.110	0.0200	4.324	0.2313	0.1053	24	3.40	NA	0
002.99	Nitrate Nitrogen, Other (%)	0549	6.310	0.0800	4.324	0.2313	0.1053	24	8.59	NA	0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0309	11.00	0.0300	11.13	0.0965	0.1440	5	-1.36		0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0169	11.11	0.0600	11.13	0.0965	0.1440	5	-0.17		0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0537	11.12	0.3300	11.13	0.0965	0.1440	5	-0.11		0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0444	11.15	0.2100	11.13	0.0965	0.1440	5	0.20		0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0200	11.27	0.0900	11.13	0.0965	0.1440	5	1.44		0
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	0518	11.20	0.2000				2			0
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	0513	11.43	0.0400				2			0
010.11	Total Nitrogen, Modified Comprehensive (11%)	0510	10.50	0.0581	11.20	0.2771	0.0814	6	-2.25	Low	0
010.11	Total Nitrogen, Modified Comprehensive (11%)	0309	11.16	0.0700	11.20	0.2771	0.0814	6	-0.15	OK	0
010.11	Total Nitrogen, Modified Comprehensive (11%)	0105	11.17	0.0800	11.20	0.2771	0.0814	6	-0.10	OK	0
010.11	Total Nitrogen, Modified Comprehensive (11%)	0531	11.23	0.0500	11.20	0.2771	0.0814	6	0.07	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				
010.11	Total Nitrogen, Modified Comprehensive (11%)	0522	11.26	0.0200	11.20	0.2771	0.0814	6	0.18	OK	0
010.11	Total Nitrogen, Modified Comprehensive (11%)	0546	11.86	0.2100	11.20	0.2771	0.0814	6	2.10	High	0
010.12	Total Nitrogen, Salicylic (11%)	0498	10.80	0.2000	11.17	0.3773	0.0874	3	-0.99		0
010.12	Total Nitrogen, Salicylic (11%)	0416	11.17	0.0100	11.17	0.3773	0.0874	3	-0.02		0
010.12	Total Nitrogen, Salicylic (11%)	0397	11.55	0.0521	11.17	0.3773	0.0874	3	1.01		0
010.60	Total Nitrogen, Combustion (11%)	0325	10.90	0.2000	11.29	0.1083	0.0837	59	-3.64	OK	0
010.60	Total Nitrogen, Combustion (11%)	0234	11.00	0.2000	11.29	0.1083	0.0837	59	-2.71	OK	0
010.60	Total Nitrogen, Combustion (11%)	0255	11.04	0.1900	11.29	0.1083	0.0837	59	-2.31	OK	0
010.60	Total Nitrogen, Combustion (11%)	0027	11.12	0.0400	11.29	0.1083	0.0837	59	-1.61	OK	0
010.60	Total Nitrogen, Combustion (11%)	0534	11.13	0.0100	11.29	0.1083	0.0837	59	-1.56	OK	0
010.60	Total Nitrogen, Combustion (11%)	0042	11.14	0.2000	11.29	0.1083	0.0837	59	-1.42	OK	0
010.60	Total Nitrogen, Combustion (11%)	0307	11.15	0.2400	11.29	0.1083	0.0837	59	-1.33	OK	0
010.60	Total Nitrogen, Combustion (11%)	0072	11.16	0.1600	11.29	0.1083	0.0837	59	-1.24	OK	0
010.60	Total Nitrogen, Combustion (11%)	0525	11.18	0.0600	11.29	0.1083	0.0837	59	-1.05	OK	0
010.60	Total Nitrogen, Combustion (11%)	0486	11.20	0.0200	11.29	0.1083	0.0837	59	-0.87	OK	0
010.60	Total Nitrogen, Combustion (11%)	0501	11.20	0.0000	11.29	0.1083	0.0837	59	-0.87	OK	0
010.60	Total Nitrogen, Combustion (11%)	0523	11.20	0.0000	11.29	0.1083	0.0837	59	-0.87	OK	0
010.60	Total Nitrogen, Combustion (11%)	0472	11.21	0.0100	11.29	0.1083	0.0837	59	-0.82	OK	0
010.60	Total Nitrogen, Combustion (11%)	0043	11.23	0.0400	11.29	0.1083	0.0837	59	-0.59	OK	0
010.60	Total Nitrogen, Combustion (11%)	0177	11.23	0.0600	11.29	0.1083	0.0837	59	-0.59	OK	0
010.60	Total Nitrogen, Combustion (11%)	0405	11.23	0.0400	11.29	0.1083	0.0837	59	-0.59	OK	0
010.60	Total Nitrogen, Combustion (11%)	0390	11.24	0.0100	11.29	0.1083	0.0837	59	-0.54	OK	0
010.60	Total Nitrogen, Combustion (11%)	0034	11.24	0.0000	11.29	0.1083	0.0837	59	-0.50	OK	0
010.60	Total Nitrogen, Combustion (11%)	0354	11.25	0.1000	11.29	0.1083	0.0837	59	-0.41	OK	0
010.60	Total Nitrogen, Combustion (11%)	0482	11.25	0.1000	11.29	0.1083	0.0837	59	-0.41	OK	0
010.60	Total Nitrogen, Combustion (11%)	0096	11.26	0.0300	11.29	0.1083	0.0837	59	-0.36	OK	0
010.60	Total Nitrogen, Combustion (11%)	0451	11.26	0.0900	11.29	0.1083	0.0837	59	-0.36	OK	0
010.60	Total Nitrogen, Combustion (11%)	0423	11.27	0.0800	11.29	0.1083	0.0837	59	-0.22	OK	0
010.60	Total Nitrogen, Combustion (11%)	0402	11.28	0.0340	11.29	0.1083	0.0837	59	-0.17	OK	0
010.60	Total Nitrogen, Combustion (11%)	0105	11.29	0.0300	11.29	0.1083	0.0837	59	-0.08	OK	0
010.60	Total Nitrogen, Combustion (11%)	0035	11.29	0.0400	11.29	0.1083	0.0837	59	-0.04	OK	0
010.60	Total Nitrogen, Combustion (11%)	0389	11.29	0.0200	11.29	0.1083	0.0837	59	-0.04	OK	0
010.60	Total Nitrogen, Combustion (11%)	0452	11.30	0.0300	11.29	0.1083	0.0837	59	0.01	OK	0
010.60	Total Nitrogen, Combustion (11%)	0483	11.30	0.0700	11.29	0.1083	0.0837	59	0.01	OK	0
010.60	Total Nitrogen, Combustion (11%)	0040	11.30	0.0000	11.29	0.1083	0.0837	59	0.06	OK	0
010.60	Total Nitrogen, Combustion (11%)	0157	11.30	0.0000	11.29	0.1083	0.0837	59	0.06	OK	0
010.60	Total Nitrogen, Combustion (11%)	0324	11.30	0.2000	11.29	0.1083	0.0837	59	0.06	OK	0
010.60	Total Nitrogen, Combustion (11%)	0443	11.30	0.0400	11.29	0.1083	0.0837	59	0.06	OK	0
010.60	Total Nitrogen, Combustion (11%)	0356	11.31	0.1400	11.29	0.1083	0.0837	59	0.15	OK	0
010.60	Total Nitrogen, Combustion (11%)	0086	11.31	0.0130	11.29	0.1083	0.0837	59	0.17	OK	0
010.60	Total Nitrogen, Combustion (11%)	0185	11.32	0.0300	11.29	0.1083	0.0837	59	0.19	OK	0
010.60	Total Nitrogen, Combustion (11%)	0073	11.33	0.0100	11.29	0.1083	0.0837	59	0.29	OK	0
010.60	Total Nitrogen, Combustion (11%)	0049	11.33	0.0400	11.29	0.1083	0.0837	59	0.33	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total Nitrogen, Combustion (11%)	0368	11.33	0.0510	11.29	0.1083	0.0837	59	0.34	OK	0
010.60	Total Nitrogen, Combustion (11%)	0231	11.34	0.0100	11.29	0.1083	0.0837	59	0.38	OK	0
010.60	Total Nitrogen, Combustion (11%)	0291	11.34	0.0100	11.29	0.1083	0.0837	59	0.38	OK	0
010.60	Total Nitrogen, Combustion (11%)	0292	11.34	0.0100	11.29	0.1083	0.0837	59	0.38	OK	0
010.60	Total Nitrogen, Combustion (11%)	0485	11.35	0.2000	11.29	0.1083	0.0837	59	0.52	OK	0
010.60	Total Nitrogen, Combustion (11%)	0114	11.36	0.1300	11.29	0.1083	0.0837	59	0.56	OK	0
010.60	Total Nitrogen, Combustion (11%)	0444	11.36	0.0300	11.29	0.1083	0.0837	59	0.56	OK	0
010.60	Total Nitrogen, Combustion (11%)	0360	11.37	0.0500	11.29	0.1083	0.0837	59	0.66	OK	0
010.60	Total Nitrogen, Combustion (11%)	0136	11.37	0.1400	11.29	0.1083	0.0837	59	0.70	OK	0
010.60	Total Nitrogen, Combustion (11%)	0547	11.37	0.0400	11.29	0.1083	0.0837	59	0.70	OK	0
010.60	Total Nitrogen, Combustion (11%)	0037	11.39	0.0770	11.29	0.1083	0.0837	59	0.93	OK	0
010.60	Total Nitrogen, Combustion (11%)	0550	11.40	0.0200	11.29	0.1083	0.0837	59	0.98	OK	0
010.60	Total Nitrogen, Combustion (11%)	0419	11.41	0.1000	11.29	0.1083	0.0837	59	1.07	OK	0
010.60	Total Nitrogen, Combustion (11%)	0095	11.42	0.2200	11.29	0.1083	0.0837	59	1.16	OK	0
010.60	Total Nitrogen, Combustion (11%)	0023	11.42	0.3410	11.29	0.1083	0.0837	59	1.21	OK	0
010.60	Total Nitrogen, Combustion (11%)	0102	11.45	0.1000	11.29	0.1083	0.0837	59	1.44	OK	0
010.60	Total Nitrogen, Combustion (11%)	0029	11.46	0.2000	11.29	0.1083	0.0837	59	1.53	OK	0
010.60	Total Nitrogen, Combustion (11%)	0131	11.51	0.1250	11.29	0.1083	0.0837	59	2.01	OK	0
010.60	Total Nitrogen, Combustion (11%)	0230	11.55	0.3000	11.29	0.1083	0.0837	59	2.36	OK	0
010.60	Total Nitrogen, Combustion (11%)	0025	11.64	0.2100	11.29	0.1083	0.0837	59	3.15	OK	0
010.60	Total Nitrogen, Combustion (11%)	0117	11.70	0.0000	11.29	0.1083	0.0837	59	3.75	OK	0
010.60	Total Nitrogen, Combustion (11%)	0527	11.45	0.4190	11.29	0.1083	0.0837	59	1.41	OK	1
010.60	Total Nitrogen, Combustion (11%)	0422	1.815	0.0300	11.29	0.1083	0.0837	59	-87.51	Low	2
010.99	Total Nitrogen, Other (11%)	0481	10.58	0.1000	11.16	0.2322	0.0864	13	-2.50	OK	0
010.99	Total Nitrogen, Other (11%)	0544	10.96	0.0200	11.16	0.2322	0.0864	13	-0.86	OK	0
010.99	Total Nitrogen, Other (11%)	0545	10.97	0.0200	11.16	0.2322	0.0864	13	-0.82	OK	0
010.99	Total Nitrogen, Other (11%)	0519	11.03	0.0200	11.16	0.2322	0.0864	13	-0.56	OK	0
010.99	Total Nitrogen, Other (11%)	0532	11.05	0.1800	11.16	0.2322	0.0864	13	-0.47	OK	0
010.99	Total Nitrogen, Other (11%)	0394	11.09	0.0870	11.16	0.2322	0.0864	13	-0.29	OK	0
010.99	Total Nitrogen, Other (11%)	0493	11.10	0.1000	11.16	0.2322	0.0864	13	-0.26	OK	0
010.99	Total Nitrogen, Other (11%)	0531	11.25	0.0500	11.16	0.2322	0.0864	13	0.37	OK	0
010.99	Total Nitrogen, Other (11%)	0524	11.25	0.0490	11.16	0.2322	0.0864	13	0.38	OK	0
010.99	Total Nitrogen, Other (11%)	0220	11.25	0.1000	11.16	0.2322	0.0864	13	0.39	OK	0
010.99	Total Nitrogen, Other (11%)	0476	11.38	0.0674	11.16	0.2322	0.0864	13	0.95	OK	0
010.99	Total Nitrogen, Other (11%)	0520	11.44	0.3300	11.16	0.2322	0.0864	13	1.18	OK	0
010.99	Total Nitrogen, Other (11%)	0506	11.70	0.0000	11.16	0.2322	0.0864	13	2.33	OK	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0114	10.81	0.0900	11.05	0.3396	0.2200	3	-0.71		0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0493	10.90	0.1000	11.05	0.3396	0.2200	3	-0.43		0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0444	11.44	0.4700	11.05	0.3396	0.2200	3	1.14		0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0309	10.36	0.1100	10.84	0.1967	0.1634	19	-2.47	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0506	10.55	0.3000	10.84	0.1967	0.1634	19	-1.48	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0476	10.57	0.0691	10.84	0.1967	0.1634	19	-1.36	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0324	10.60	0.6000	10.84	0.1967	0.1634	19	-1.22	NA	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0371	10.75	0.1000	10.84	0.1967	0.1634	19	-0.46	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0481	10.80	0.4700	10.84	0.1967	0.1634	19	-0.23	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0550	10.81	0.2700	10.84	0.1967	0.1634	19	-0.18	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0419	10.83	0.0400	10.84	0.1967	0.1634	19	-0.05	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0231	10.84	0.0200	10.84	0.1967	0.1634	19	0.00	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0394	10.87	0.0300	10.84	0.1967	0.1634	19	0.16	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0522	10.88	0.0100	10.84	0.1967	0.1634	19	0.17	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0510	10.88	0.0157	10.84	0.1967	0.1634	19	0.21	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0455	10.94	0.0200	10.84	0.1967	0.1634	19	0.51	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0405	10.94	0.0600	10.84	0.1967	0.1634	19	0.51	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0027	10.95	0.4900	10.84	0.1967	0.1634	19	0.53	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0169	11.02	0.0800	10.84	0.1967	0.1634	19	0.91	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0356	11.04	0.2800	10.84	0.1967	0.1634	19	1.01	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0553	11.05	0.0800	10.84	0.1967	0.1634	19	1.06	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0534	11.12	0.0600	10.84	0.1967	0.1634	19	1.42	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0416	6.255	9.110	10.84	0.1967	0.1634	19	-23.32	NA	2
020.40	Total Phosphorus as P2O5, Automated (%)	0096	10.49	0.1300				1			0
020.50	Total Phosphorus as P2O5, ICP (%)	0552	9.715	0.2500	10.77	0.5204	0.2353	24	-2.03	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0389	10.13	0.0100	10.77	0.5204	0.2353	24	-1.25	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0516	10.21	0.8700	10.77	0.5204	0.2353	24	-1.09	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0472	10.22	0.0300	10.77	0.5204	0.2353	24	-1.07	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0451	10.26	0.1400	10.77	0.5204	0.2353	24	-0.99	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0523	10.35	0.3000	10.77	0.5204	0.2353	24	-0.81	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0525	10.39	0.5500	10.77	0.5204	0.2353	24	-0.75	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0307	10.47	0.9100	10.77	0.5204	0.2353	24	-0.59	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0483	10.52	0.1400	10.77	0.5204	0.2353	24	-0.49	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0255	10.62	0.3410	10.77	0.5204	0.2353	24	-0.30	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0423	10.66	0.0900	10.77	0.5204	0.2353	24	-0.23	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0547	10.75	0.3000	10.77	0.5204	0.2353	24	-0.04	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0546	10.82	0.0210	10.77	0.5204	0.2353	24	0.09	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0291	10.83	0.0100	10.77	0.5204	0.2353	24	0.10	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0433	11.00	0.0200	10.77	0.5204	0.2353	24	0.44	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0234	11.10	0.2000	10.77	0.5204	0.2353	24	0.63	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0482	11.10	0.0000	10.77	0.5204	0.2353	24	0.63	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0368	11.11	0.0229	10.77	0.5204	0.2353	24	0.64	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0444	11.29	0.4900	10.77	0.5204	0.2353	24	0.98	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0527	11.29	0.2234	10.77	0.5204	0.2353	24	0.99	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0402	11.29	0.0152	10.77	0.5204	0.2353	24	1.00	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0390	11.30	0.0200	10.77	0.5204	0.2353	24	1.01	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0501	11.35	0.1100	10.77	0.5204	0.2353	24	1.10	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0524	12.30	0.5844	10.77	0.5204	0.2353	24	2.94	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0422	9.848	1.364	10.77	0.5204	0.2353	24	-1.78	NA	1
020.99	Total Phosphorus as P2O5, Other (%)	0515	7.490	0.3349	10.40	2.011	0.2237	4	-1.45		0

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020.99	Total Phosphorus as P2O5, Other (%)	0513	10.63	0.0200	10.40	2.011	0.2237	4	0.11		0
020.99	Total Phosphorus as P2O5, Other (%)	0443	11.72	0.2200	10.40	2.011	0.2237	4	0.65		0
020.99	Total Phosphorus as P2O5, Other (%)	0520	11.77	0.3200	10.40	2.011	0.2237	4	0.68		0
030.40	Citrate Insoluble Phosphorus as P2O5, Automat... (%)	0096	0.2400	0.2000				1			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (11%)	0498	10.75	0.1000				2			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (11%)	0405	10.84	0.0700				2			0
040.40	Indirect Available Phosphorus as P2O5, Automa... (11%)	0096	10.25	0.3200				1			0
040.99	Indirect Available Phosphorus as P2O5, Other (11%)	0394	10.76	0.0410				1			0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (11%)	0049	10.34	0.0100	10.58	0.1709	0.1297	4	-1.44		0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (11%)	0102	10.60	0.4000	10.58	0.1709	0.1297	4	0.11		0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (11%)	0086	10.69	0.0481	10.58	0.1709	0.1297	4	0.62		0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (11%)	0177	10.70	0.0608	10.58	0.1709	0.1297	4	0.72		0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (11%)	0485	10.51	0.2352	10.62	0.1256	0.0884	6	-0.78	OK	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (11%)	0185	10.52	0.0100	10.62	0.1256	0.0884	6	-0.76	OK	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (11%)	0513	10.60	0.0600	10.62	0.1256	0.0884	6	-0.16	OK	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (11%)	0220	10.63	0.0800	10.62	0.1256	0.0884	6	0.05	OK	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (11%)	0105	10.67	0.0900	10.62	0.1256	0.0884	6	0.30	OK	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (11%)	0117	10.88	0.0550	10.62	0.1256	0.0884	6	1.85	OK	0
041.20	Direct Available Phosphorus as P2O5, Spectrop... (11%)	0027	10.16	0.2100				1			0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (11%)	0106	10.49	0.1300				2			0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (11%)	0200	10.80	0.0400				2			0
041.40	Direct Available Phosphorus as P2O5, Automate... (11%)	0095	10.13	0.1500				1			0
041.50	Direct Available Phosphorus as P2O5, ICP (11%)	0325	10.60	0.8000	10.76	0.1651	0.3167	3	-0.98		0
041.50	Direct Available Phosphorus as P2O5, ICP (11%)	0452	10.76	0.0500	10.76	0.1651	0.3167	3	-0.04		0
041.50	Direct Available Phosphorus as P2O5, ICP (11%)	0131	10.93	0.1000	10.76	0.1651	0.3167	3	1.02		0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0025	8.400	0.0600	10.72	0.2678	0.0566	12	-8.68	Low	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0423	9.375	0.1900	10.72	0.2678	0.0566	12	-5.03	Low	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0486	10.58	0.0500	10.72	0.2678	0.0566	12	-0.55	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0037	10.61	0.0200	10.72	0.2678	0.0566	12	-0.42	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0040	10.65	0.1000	10.72	0.2678	0.0566	12	-0.27	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0377	10.77	0.0800	10.72	0.2678	0.0566	12	0.17	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0117	10.79	0.0150	10.72	0.2678	0.0566	12	0.25	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0043	10.82	0.0100	10.72	0.2678	0.0566	12	0.34	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0023	10.90	0.0400	10.72	0.2678	0.0566	12	0.66	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0072	10.92	0.0500	10.72	0.2678	0.0566	12	0.72	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0368	10.94	0.0446	10.72	0.2678	0.0566	12	0.81	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (11%)	0360	11.07	0.0200	10.72	0.2678	0.0566	12	1.29	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (11%)	0230	8.550	0.0600	10.53	0.4267	0.0512	12	-4.63	Low	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (11%)	0472	10.07	0.0000	10.53	0.4267	0.0512	12	-1.07	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (11%)	0397	10.07	0.1441	10.53	0.4267	0.0512	12	-1.07	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (11%)	0177	10.20	0.0058	10.53	0.4267	0.0512	12	-0.77	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (11%)	0354	10.45	0.1000	10.53	0.4267	0.0512	12	-0.18	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (11%)	0029	10.67	0.0100	10.53	0.4267	0.0512	12	0.33	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				
041.60	Direct Available Phosphorus as P2O5, Citrate... (11%)	0394	10.73	0.0110	10.53	0.4267	0.0512	12	0.47	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (11%)	0105	10.76	0.1600	10.53	0.4267	0.0512	12	0.55	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (11%)	0034	10.82	0.0010	10.53	0.4267	0.0512	12	0.68	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (11%)	0231	10.82	0.0600	10.53	0.4267	0.0512	12	0.69	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (11%)	0073	10.85	0.0500	10.53	0.4267	0.0512	12	0.75	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (11%)	0072	11.01	0.0130	10.53	0.4267	0.0512	12	1.13	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (11%)	0405	10.55	0.1200	11.01	0.2681	0.1000	10	-1.58	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (11%)	0518	10.68	0.0500	11.01	0.2681	0.1000	10	-1.15	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (11%)	0519	10.91	0.0200	11.01	0.2681	0.1000	10	-0.33	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (11%)	0536	10.99	0.0600	11.01	0.2681	0.1000	10	-0.06	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (11%)	0549	11.03	0.0500	11.01	0.2681	0.1000	10	0.07	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (11%)	0531	11.05	0.0300	11.01	0.2681	0.1000	10	0.13	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (11%)	0537	11.07	0.2100	11.01	0.2681	0.1000	10	0.20	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (11%)	0545	11.13	0.0600	11.01	0.2681	0.1000	10	0.43	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (11%)	0532	11.21	0.1000	11.01	0.2681	0.1000	10	0.71	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (11%)	0540	12.15	0.3000	11.01	0.2681	0.1000	10	3.97	High	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0309	8.070	0.0400				2			0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0394	8.718	0.0910				2			0
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	0096	8.265	0.2500				1			0
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	0546	9.128	0.1610				1			0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0513	8.660	0.1000				1			0
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	0544	20.87	0.0200	21.79	0.4460	0.1078	9	-1.91	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	0102	21.00	0.4000	21.79	0.4460	0.1078	9	-1.64	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	0405	21.83	0.0700	21.79	0.4460	0.1078	9	0.07	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	0231	21.93	0.0500	21.79	0.4460	0.1078	9	0.28	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	0522	21.93	0.1600	21.79	0.4460	0.1078	9	0.29	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	0416	21.94	0.0000	21.79	0.4460	0.1078	9	0.31	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	0220	21.97	0.0500	21.79	0.4460	0.1078	9	0.36	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	0550	22.13	0.1100	21.79	0.4460	0.1078	9	0.69	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	0049	22.17	0.1100	21.79	0.4460	0.1078	9	0.77	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (21%)	0114	22.51	1.180	21.79	0.4460	0.1078	9	1.49	OK	1
050.30	Soluble Potassium as K2O, AA (Oxalate) (21%)	0309	20.90	0.0500	22.66	1.673	0.4040	5	-1.06		0
050.30	Soluble Potassium as K2O, AA (Oxalate) (21%)	0040	22.10	0.8000	22.66	1.673	0.4040	5	-0.34		0
050.30	Soluble Potassium as K2O, AA (Oxalate) (21%)	0356	22.16	0.4300	22.66	1.673	0.4040	5	-0.30		0
050.30	Soluble Potassium as K2O, AA (Oxalate) (21%)	0073	22.76	0.3400	22.66	1.673	0.4040	5	0.06		0
050.30	Soluble Potassium as K2O, AA (Oxalate) (21%)	0498	25.40	0.4000	22.66	1.673	0.4040	5	1.64		0
050.31	Soluble Potassium as K2O, AA (Citrate) (21%)	0472	21.55	0.5000				1			0
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (21%)	0185	21.23	0.4800				1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (21%)	0324	18.55	0.1000	21.73	1.137	0.3197	8	-2.56	Low	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (21%)	0422	20.65	0.0200	21.73	1.137	0.3197	8	-0.87	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (21%)	0230	21.45	1.700	21.73	1.137	0.3197	8	-0.22	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (21%)	0292	21.61	0.1200	21.73	1.137	0.3197	8	-0.10	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (21%)	0397	22.25	0.0576	21.73	1.137	0.3197	8	0.42	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
050.50	Soluble Potassium as K2O, ICP (Oxalate) (21%)	0106	22.30	0.1900	21.73	1.137	0.3197	8	0.45	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (21%)	0419	22.58	0.0100	21.73	1.137	0.3197	8	0.68	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (21%)	0444	22.98	0.3600	21.73	1.137	0.3197	8	1.01	High	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (21%)	0390	19.92	3.080	21.73	1.137	0.3197	8	-1.46	Low	1
050.51	Soluble Potassium as K2O, ICP (Citrate) (21%)	0547	21.07	0.0000	22.57	1.380	0.2420	5	-1.08		0
050.51	Soluble Potassium as K2O, ICP (Citrate) (21%)	0483	21.93	0.9700	22.57	1.380	0.2420	5	-0.46		0
050.51	Soluble Potassium as K2O, ICP (Citrate) (21%)	0291	22.52	0.0100	22.57	1.380	0.2420	5	-0.04		0
050.51	Soluble Potassium as K2O, ICP (Citrate) (21%)	0452	22.52	0.1000	22.57	1.380	0.2420	5	-0.03		0
050.51	Soluble Potassium as K2O, ICP (Citrate) (21%)	0131	24.80	0.1300	22.57	1.380	0.2420	5	1.62		0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0025	16.85	0.1000	21.39	1.219	0.2433	11	-3.48	Low	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0486	20.00	0.0900	21.39	1.219	0.2433	11	-1.07	Low	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0072	20.53	0.6800	21.39	1.219	0.2433	11	-0.66	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0354	20.95	0.3000	21.39	1.219	0.2433	11	-0.33	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0423	21.09	0.0200	21.39	1.219	0.2433	11	-0.23	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0043	21.67	0.0100	21.39	1.219	0.2433	11	0.21	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0037	21.69	0.1500	21.39	1.219	0.2433	11	0.23	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0377	21.84	0.0300	21.39	1.219	0.2433	11	0.34	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0023	22.50	0.8500	21.39	1.219	0.2433	11	0.85	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0360	22.51	0.3600	21.39	1.219	0.2433	11	0.86	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (21%)	0117	22.94	0.0860	21.39	1.219	0.2433	11	1.19	High	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (21%)	0476	20.27	0.1847	21.17	0.8560	0.1306	6	-0.93	OK	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (21%)	0455	20.34	0.0800	21.17	0.8560	0.1306	6	-0.86	OK	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (21%)	0510	20.95	0.0991	21.17	0.8560	0.1306	6	-0.23	OK	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (21%)	0200	21.66	0.0500	21.17	0.8560	0.1306	6	0.51	OK	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (21%)	0169	21.82	0.1300	21.17	0.8560	0.1306	6	0.67	OK	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (21%)	0443	21.98	0.2400	21.17	0.8560	0.1306	6	0.84	OK	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (21%)	0095	21.39	0.2800	21.84	0.2579	0.1820	5	-1.75		0
050.62	Soluble Potassium as K2O, Flame Photometric ... (21%)	0105	21.89	0.1700	21.84	0.2579	0.1820	5	0.17		0
050.62	Soluble Potassium as K2O, Flame Photometric ... (21%)	0513	21.92	0.0500	21.84	0.2579	0.1820	5	0.29		0
050.62	Soluble Potassium as K2O, Flame Photometric ... (21%)	0029	21.99	0.3300	21.84	0.2579	0.1820	5	0.56		0
050.62	Soluble Potassium as K2O, Flame Photometric ... (21%)	0034	22.03	0.0800	21.84	0.2579	0.1820	5	0.72		0
050.99	Soluble Potassium as K2O, Other (21%)	0515	17.53	1.695	21.62	0.6870	0.3090	36	-5.95	Low	0
050.99	Soluble Potassium as K2O, Other (21%)	0523	20.20	0.8000	21.62	0.6870	0.3090	36	-2.07	Low	0
050.99	Soluble Potassium as K2O, Other (21%)	0481	20.67	0.1000	21.62	0.6870	0.3090	36	-1.38	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0255	20.82	0.5380	21.62	0.6870	0.3090	36	-1.17	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0553	21.02	0.1500	21.62	0.6870	0.3090	36	-0.88	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0537	21.02	0.2200	21.62	0.6870	0.3090	36	-0.87	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0519	21.03	0.0030	21.62	0.6870	0.3090	36	-0.85	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0536	21.05	0.2000	21.62	0.6870	0.3090	36	-0.83	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0532	21.11	0.3800	21.62	0.6870	0.3090	36	-0.74	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0501	21.13	0.1500	21.62	0.6870	0.3090	36	-0.72	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0451	21.18	0.3200	21.62	0.6870	0.3090	36	-0.64	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0518	21.20	0.0000	21.62	0.6870	0.3090	36	-0.61	OK	0

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050.99	Soluble Potassium as K2O, Other (21%)	0444	21.33	0.9700	21.62	0.6870	0.3090	36	-0.43	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0482	21.35	0.1000	21.62	0.6870	0.3090	36	-0.39	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0516	21.37	0.3800	21.62	0.6870	0.3090	36	-0.36	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0549	21.45	0.1000	21.62	0.6870	0.3090	36	-0.25	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0527	21.45	0.0297	21.62	0.6870	0.3090	36	-0.24	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0096	21.54	0.2500	21.62	0.6870	0.3090	36	-0.12	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0394	21.59	0.0840	21.62	0.6870	0.3090	36	-0.05	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0524	21.65	1.208	21.62	0.6870	0.3090	36	0.04	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0027	21.72	0.0830	21.62	0.6870	0.3090	36	0.14	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0545	21.76	0.0000	21.62	0.6870	0.3090	36	0.20	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0433	21.85	0.0700	21.62	0.6870	0.3090	36	0.33	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0177	21.90	0.1316	21.62	0.6870	0.3090	36	0.40	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0506	21.90	0.2000	21.62	0.6870	0.3090	36	0.41	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0493	22.15	0.1000	21.62	0.6870	0.3090	36	0.77	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0402	22.21	0.0871	21.62	0.6870	0.3090	36	0.86	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0234	22.26	0.1200	21.62	0.6870	0.3090	36	0.93	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0325	22.30	0.4000	21.62	0.6870	0.3090	36	0.99	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0520	22.35	0.1000	21.62	0.6870	0.3090	36	1.06	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0389	22.36	0.0600	21.62	0.6870	0.3090	36	1.08	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0368	22.39	0.5547	21.62	0.6870	0.3090	36	1.12	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0307	22.47	0.3600	21.62	0.6870	0.3090	36	1.24	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0540	22.50	1.000	21.62	0.6870	0.3090	36	1.28	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0546	22.54	0.0810	21.62	0.6870	0.3090	36	1.33	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0531	22.55	0.1000	21.62	0.6870	0.3090	36	1.35	OK	0
050.99	Soluble Potassium as K2O, Other (21%)	0552	19.15	3.760	21.62	0.6870	0.3090	36	-3.59	Low	1
060.00	Water (Free), Vacuum Oven (%)	0096	0.6550	0.0300				1			0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 h... (%)	0513	0.7100	0.0200				2			0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 h... (%)	0518	0.9150	0.0500				2			0
060.99	Water (Free), Other (%)	0510	0.2863	0.0261				2			0
060.99	Water (Free), Other (%)	0513	0.5605	0.0210				2			0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0535	0.1550	0.0100				2			0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0553	1.328	0.0320				2			0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0354	1.265	0.1300	1.418	0.1629	0.0643	7	-0.85	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0324	1.300	0.0400	1.418	0.1629	0.0643	7	-0.66	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0472	1.330	0.0000	1.418	0.1629	0.0643	7	-0.49	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0482	1.370	0.0400	1.418	0.1629	0.0643	7	-0.27	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0231	1.460	0.0800	1.418	0.1629	0.0643	7	0.23	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0483	1.540	0.0000	1.418	0.1629	0.0643	7	0.68	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0096	1.760	0.1600	1.418	0.1629	0.0643	7	1.90	High	0
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0028	1.345	0.0100				2			0
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0423	1.375	0.0110				2			0
101.33	Acid Soluble Calcium, ICP, 2017.02 (%)	0043	1.325	0.0700	1.383	0.0736	0.0332	3	-0.79		0
101.33	Acid Soluble Calcium, ICP, 2017.02 (%)	0106	1.358	0.0077	1.383	0.0736	0.0332	3	-0.34		0

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101.33	Acid Soluble Calcium, ICP, 2017.02 (%)	0527	1.466	0.0218	1.383	0.0736	0.0332	3	1.13		0
101.99	Acid Soluble Calcium, Other (%)	0552	1.445	0.0300				2			0
101.99	Acid Soluble Calcium, Other (%)	0389	1.649	0.9070				2			0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.5%)	0535	1.455	0.0100	1.650	0.1650	0.0492	10	-1.10	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.5%)	0105	1.492	0.0340	1.650	0.1650	0.0492	10	-0.89	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.5%)	0040	1.545	0.0500	1.650	0.1650	0.0492	10	-0.59	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.5%)	0309	1.550	0.0600	1.650	0.1650	0.0492	10	-0.57	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.5%)	0498	1.600	0.0000	1.650	0.1650	0.0492	10	-0.28	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.5%)	0513	1.690	0.0200	1.650	0.1650	0.0492	10	0.22	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.5%)	0029	1.717	0.1330	1.650	0.1650	0.0492	10	0.37	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.5%)	0169	1.740	0.0800	1.650	0.1650	0.0492	10	0.50	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.5%)	0553	1.819	0.0550	1.650	0.1650	0.0492	10	0.95	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.5%)	0550	2.515	0.0500	1.650	0.1650	0.0492	10	4.87	High	0
121.03	Acid Soluble Magnesium, AA, 965.09, test port... (1.5%)	0546	1.544	0.0120				1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0482	1.190	0.2200	1.562	0.1443	0.0522	19	-2.58	Low	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0371	1.340	0.0000	1.562	0.1443	0.0522	19	-1.54	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0255	1.368	0.0160	1.562	0.1443	0.0522	19	-1.35	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0433	1.415	0.0020	1.562	0.1443	0.0522	19	-1.02	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0419	1.509	0.0380	1.562	0.1443	0.0522	19	-0.37	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0354	1.510	0.1600	1.562	0.1443	0.0522	19	-0.36	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0324	1.535	0.1300	1.562	0.1443	0.0522	19	-0.19	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0377	1.540	0.0400	1.562	0.1443	0.0522	19	-0.15	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0307	1.565	0.0500	1.562	0.1443	0.0522	19	0.02	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0360	1.570	0.0000	1.562	0.1443	0.0522	19	0.05	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0231	1.585	0.1100	1.562	0.1443	0.0522	19	0.16	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0096	1.605	0.0300	1.562	0.1443	0.0522	19	0.30	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0102	1.619	0.0206	1.562	0.1443	0.0522	19	0.40	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0444	1.640	0.0200	1.562	0.1443	0.0522	19	0.54	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0234	1.650	0.1000	1.562	0.1443	0.0522	19	0.61	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0483	1.655	0.0300	1.562	0.1443	0.0522	19	0.64	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0390	1.666	0.0150	1.562	0.1443	0.0522	19	0.72	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0472	1.790	0.0000	1.562	0.1443	0.0522	19	1.58	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.5%)	0291	1.795	0.0100	1.562	0.1443	0.0522	19	1.61	OK	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.5%)	0423	1.490	0.0300	1.539	0.0407	0.0147	4	-1.19		0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.5%)	0394	1.525	0.0088	1.539	0.0407	0.0147	4	-0.34		0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.5%)	0292	1.555	0.0100	1.539	0.0407	0.0147	4	0.40		0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.5%)	0028	1.585	0.0100	1.539	0.0407	0.0147	4	1.14		0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	0043	1.435	0.0500	1.545	0.0926	0.0222	9	-1.10	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	0515	1.457	0.0058	1.545	0.0926	0.0222	9	-0.87	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	0397	1.470	0.0310	1.545	0.0926	0.0222	9	-0.75	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	0106	1.484	0.0025	1.545	0.0926	0.0222	9	-0.61	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	0177	1.587	0.0179	1.545	0.0926	0.0222	9	0.42	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	0527	1.589	0.0160	1.545	0.0926	0.0222	9	0.44	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	0037	1.619	0.0090	1.545	0.0926	0.0222	9	0.73	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	0486	1.630	0.0600	1.545	0.0926	0.0222	9	0.85	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	0023	1.634	0.0080	1.545	0.0926	0.0222	9	0.89	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (1.5%)	0525	1.825	0.2500	1.545	0.0926	0.0222	9	2.79	High	1
121.99	Acid Soluble Magnesium, Other (1.5%)	0476	1.095	0.0497	1.578	0.1690	0.0341	15	-2.86	Low	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0515	1.389	0.0228	1.578	0.1690	0.0341	15	-1.12	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0524	1.414	0.0300	1.578	0.1690	0.0341	15	-0.97	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0552	1.490	0.0000	1.578	0.1690	0.0341	15	-0.52	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0516	1.515	0.0100	1.578	0.1690	0.0341	15	-0.37	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0481	1.520	0.0000	1.578	0.1690	0.0341	15	-0.34	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0519	1.520	0.0200	1.578	0.1690	0.0341	15	-0.34	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0389	1.533	0.0040	1.578	0.1690	0.0341	15	-0.26	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0405	1.620	0.0800	1.578	0.1690	0.0341	15	0.25	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0506	1.645	0.0100	1.578	0.1690	0.0341	15	0.40	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0523	1.650	0.1000	1.578	0.1690	0.0341	15	0.43	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0027	1.692	0.0870	1.578	0.1690	0.0341	15	0.67	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0368	1.696	0.0279	1.578	0.1690	0.0341	15	0.70	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0520	1.825	0.0100	1.578	0.1690	0.0341	15	1.46	OK	0
121.99	Acid Soluble Magnesium, Other (1.5%)	0200	3.620	0.0600	1.578	0.1690	0.0341	15	12.09	High	0
131.00	Water Soluble Magnesium, AA (%)	0309	0.6050	0.0100	1.449	0.8122	0.1403	3	-1.04		0
131.00	Water Soluble Magnesium, AA (%)	0029	1.518	0.0810	1.449	0.8122	0.1403	3	0.08		0
131.00	Water Soluble Magnesium, AA (%)	0550	2.225	0.3300	1.449	0.8122	0.1403	3	0.96		0
131.30	Water Soluble Magnesium, ICP (%)	0444	0.4700	0.0000	1.107	0.4433	0.0885	6	-1.28	NA	0
131.30	Water Soluble Magnesium, ICP (%)	0546	0.7920	0.3120	1.107	0.4433	0.0885	6	-0.63	NA	0
131.30	Water Soluble Magnesium, ICP (%)	0501	1.200	0.2000	1.107	0.4433	0.0885	6	0.19	NA	0
131.30	Water Soluble Magnesium, ICP (%)	0394	1.335	0.0062	1.107	0.4433	0.0885	6	0.46	NA	0
131.30	Water Soluble Magnesium, ICP (%)	0405	1.400	0.0000	1.107	0.4433	0.0885	6	0.59	NA	0
131.30	Water Soluble Magnesium, ICP (%)	0422	1.443	0.0130	1.107	0.4433	0.0885	6	0.67	NA	0
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	0518	0.8600	0.1200				2			0
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	0510	2.678	0.0237				2			0
131.99	Water Soluble Magnesium, Other (%)	0506	1.425	0.0500	1.938	0.7629	0.0367	3	-0.67		0
131.99	Water Soluble Magnesium, Other (%)	0520	1.575	0.0100	1.938	0.7629	0.0367	3	-0.48		0
131.99	Water Soluble Magnesium, Other (%)	0200	2.815	0.0500	1.938	0.7629	0.0367	3	1.15		0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0095	0.1050	0.0900				1			0
143.99	Elemental Sulfur, Other (%)	0255	9.354	0.2700	10.50	0.9323	0.0817	6	-1.09	NA	0
143.99	Elemental Sulfur, Other (%)	0472	9.805	0.0100	10.50	0.9323	0.0817	6	-0.66	NA	0
143.99	Elemental Sulfur, Other (%)	0481	10.23	0.0700	10.50	0.9323	0.0817	6	-0.26	NA	0
143.99	Elemental Sulfur, Other (%)	0390	11.12	0.0700	10.50	0.9323	0.0817	6	0.59	NA	0
143.99	Elemental Sulfur, Other (%)	0389	11.17	0.0600	10.50	0.9323	0.0817	6	0.64	NA	0
143.99	Elemental Sulfur, Other (%)	0291	11.33	0.0100	10.50	0.9323	0.0817	6	0.79	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0476	9.002	0.2496	10.77	0.2362	0.0883	10	-6.98	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0444	10.58	0.1900	10.77	0.2362	0.0883	10	-0.79	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0106	10.67	0.1800	10.77	0.2362	0.0883	10	-0.41	NA	0

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145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0405	10.74	0.0800	10.77	0.2362	0.0883	10	-0.14	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0095	10.75	0.0400	10.77	0.2362	0.0883	10	-0.10	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0498	10.75	0.1000	10.77	0.2362	0.0883	10	-0.10	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0522	10.77	0.0100	10.77	0.2362	0.0883	10	-0.04	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0544	10.91	0.0100	10.77	0.2362	0.0883	10	0.51	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0027	11.04	0.0200	10.77	0.2362	0.0883	10	1.05	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0397	11.65	0.0030	10.77	0.2362	0.0883	10	3.46	NA	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0550	11.43	0.5700	10.77	0.2362	0.0883	10	2.56	NA	1
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0444	9.715	0.4300				2			0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0200	10.36	0.0600				2			0
148.00	Total Sulfur, Combustion (10%)	0114	10.30	0.1200	10.93	0.5484	0.1183	6	-1.02	OK	0
148.00	Total Sulfur, Combustion (10%)	0025	10.64	0.1300	10.93	0.5484	0.1183	6	-0.48	OK	0
148.00	Total Sulfur, Combustion (10%)	0029	10.74	0.0700	10.93	0.5484	0.1183	6	-0.32	OK	0
148.00	Total Sulfur, Combustion (10%)	0157	11.00	0.0000	10.93	0.5484	0.1183	6	0.11	OK	0
148.00	Total Sulfur, Combustion (10%)	0451	11.25	0.3000	10.93	0.5484	0.1183	6	0.52	OK	0
148.00	Total Sulfur, Combustion (10%)	0049	11.67	0.0900	10.93	0.5484	0.1183	6	1.19	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0444	10.64	0.3800	10.86	0.1761	0.1200	10	-1.18	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0230	10.75	0.1000	10.86	0.1761	0.1200	10	-0.60	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0231	10.75	0.1000	10.86	0.1761	0.1200	10	-0.60	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0405	10.76	0.0900	10.86	0.1761	0.1200	10	-0.57	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0029	10.84	0.1600	10.86	0.1761	0.1200	10	-0.12	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0095	10.86	0.1300	10.86	0.1761	0.1200	10	-0.04	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0028	10.90	0.1300	10.86	0.1761	0.1200	10	0.17	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0513	10.92	0.0100	10.86	0.1761	0.1200	10	0.28	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0371	11.10	0.0000	10.86	0.1761	0.1200	10	1.25	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0324	11.25	0.1000	10.86	0.1761	0.1200	10	2.05	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0515	7.171	0.6788	10.69	0.3893	0.3012	17	-9.03	Low	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0542	9.905	0.1100	10.69	0.3893	0.3012	17	-2.01	Low	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0527	10.27	0.2212	10.69	0.3893	0.3012	17	-1.07	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0043	10.39	0.4000	10.69	0.3893	0.3012	17	-0.76	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0037	10.43	0.2810	10.69	0.3893	0.3012	17	-0.66	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0394	10.47	0.0350	10.69	0.3893	0.3012	17	-0.56	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0023	10.69	0.0260	10.69	0.3893	0.3012	17	0.00	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0292	10.69	0.0800	10.69	0.3893	0.3012	17	0.01	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0444	10.73	0.2900	10.69	0.3893	0.3012	17	0.10	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0486	10.84	0.1800	10.69	0.3893	0.3012	17	0.40	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0177	10.86	0.0924	10.69	0.3893	0.3012	17	0.45	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0102	10.89	1.003	10.69	0.3893	0.3012	17	0.53	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0483	10.90	0.4000	10.69	0.3893	0.3012	17	0.55	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0040	10.90	0.2000	10.69	0.3893	0.3012	17	0.55	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0402	11.03	0.0633	10.69	0.3893	0.3012	17	0.87	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0525	11.11	0.9200	10.69	0.3893	0.3012	17	1.09	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (10%)	0546	11.44	0.1400	10.69	0.3893	0.3012	17	1.94	High	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
148.99	Total Sulfur, Other (10%)	0523	9.285	0.1500	10.73	0.7824	0.2726	15	-1.85	Low	0
148.99	Total Sulfur, Other (10%)	0096	9.975	0.6900	10.73	0.7824	0.2726	15	-0.97	Low	0
148.99	Total Sulfur, Other (10%)	0519	10.10	0.0200	10.73	0.7824	0.2726	15	-0.81	OK	0
148.99	Total Sulfur, Other (10%)	0516	10.35	0.9100	10.73	0.7824	0.2726	15	-0.49	OK	0
148.99	Total Sulfur, Other (10%)	0354	10.41	1.190	10.73	0.7824	0.2726	15	-0.42	OK	0
148.99	Total Sulfur, Other (10%)	0422	10.54	0.3200	10.73	0.7824	0.2726	15	-0.25	OK	0
148.99	Total Sulfur, Other (10%)	0501	10.55	0.1000	10.73	0.7824	0.2726	15	-0.23	OK	0
148.99	Total Sulfur, Other (10%)	0506	10.65	0.1000	10.73	0.7824	0.2726	15	-0.10	OK	0
148.99	Total Sulfur, Other (10%)	0368	10.70	0.0183	10.73	0.7824	0.2726	15	-0.04	OK	0
148.99	Total Sulfur, Other (10%)	0482	10.80	0.0000	10.73	0.7824	0.2726	15	0.09	OK	0
148.99	Total Sulfur, Other (10%)	0433	10.82	0.0600	10.73	0.7824	0.2726	15	0.11	OK	0
148.99	Total Sulfur, Other (10%)	0520	10.91	0.1100	10.73	0.7824	0.2726	15	0.22	OK	0
148.99	Total Sulfur, Other (10%)	0220	11.82	0.3000	10.73	0.7824	0.2726	15	1.39	High	0
148.99	Total Sulfur, Other (10%)	0072	12.00	0.0600	10.73	0.7824	0.2726	15	1.62	High	0
148.99	Total Sulfur, Other (10%)	0307	12.37	0.0600	10.73	0.7824	0.2726	15	2.09	High	0
149.02	Sulfur - HNO3 soluble, Turbidimetric, modific... (%)	0518	9.710	0.2200				1			0
149.04	Sulfur - HNO3 soluble, ICP (%)	0423	10.45	0.0600				2			0
149.04	Sulfur - HNO3 soluble, ICP (%)	0524	11.92	1.759				2			0
151.00	Acid Soluble Arsenic , AA, test portion 2006... (ppm)	0498	0.9750	0.0900				1			0
151.30	Acid Soluble Arsenic , ICP (ppm)	0394	0.9500	0.0200	1.832	0.7757	0.0628	5	-1.14		0
151.30	Acid Soluble Arsenic , ICP (ppm)	0255	1.450	0.0310	1.832	0.7757	0.0628	5	-0.49		0
151.30	Acid Soluble Arsenic , ICP (ppm)	0102	1.767	0.0000	1.832	0.7757	0.0628	5	-0.08		0
151.30	Acid Soluble Arsenic , ICP (ppm)	0501	1.951	0.0590	1.832	0.7757	0.0628	5	0.15		0
151.30	Acid Soluble Arsenic , ICP (ppm)	0524	3.042	0.2040	1.832	0.7757	0.0628	5	1.56		0
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	0527	1.988	0.0886				2			0
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	0515	5.932	4.759				2			0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0368	0.6199	0.1758				2			0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0515	1.624	0.5600				2			0
151.99	Acid Soluble Arsenic , Other (ppm)	0506	0.1845	0.0310	0.9378	0.4305	0.0883	5	-1.75		0
151.99	Acid Soluble Arsenic , Other (ppm)	0405	1.000	0.0000	0.9378	0.4305	0.0883	5	0.14		0
151.99	Acid Soluble Arsenic , Other (ppm)	0519	1.105	0.0100	0.9378	0.4305	0.0883	5	0.39		0
151.99	Acid Soluble Arsenic , Other (ppm)	0476	1.149	0.1004	0.9378	0.4305	0.0883	5	0.49		0
151.99	Acid Soluble Arsenic , Other (ppm)	0220	1.250	0.3000	0.9378	0.4305	0.0883	5	0.73		0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0498	0.0400	0.0000	0.0479	0.0041	0.0015	12	-1.93	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0169	0.0412	0.0034	0.0479	0.0041	0.0015	12	-1.63	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0397	0.0427	0.0012	0.0479	0.0041	0.0015	12	-1.27	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0220	0.0480	0.0020	0.0479	0.0041	0.0015	12	0.02	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0029	0.0490	0.0020	0.0479	0.0041	0.0015	12	0.26	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0506	0.0495	0.0010	0.0479	0.0041	0.0015	12	0.38	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0405	0.0500	0.0020	0.0479	0.0041	0.0015	12	0.51	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0481	0.0500	0.0000	0.0479	0.0041	0.0015	12	0.51	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0534	0.0500	0.0000	0.0479	0.0041	0.0015	12	0.51	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0535	0.0505	0.0010	0.0479	0.0041	0.0015	12	0.63	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				
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0550	0.0509	0.0035	0.0479	0.0041	0.0015	12	0.71	OK	0
165.00	Acid Soluble Boron , Spectrophotometric (0.05%)	0540	0.0510	0.0020	0.0479	0.0041	0.0015	12	0.75	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0354	0.0400	0.0000	0.0476	0.0021	0.0012	13	-3.57	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0389	0.0453	0.0002	0.0476	0.0021	0.0012	13	-1.07	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0390	0.0456	0.0050	0.0476	0.0021	0.0012	13	-0.92	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0324	0.0465	0.0010	0.0476	0.0021	0.0012	13	-0.50	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0043	0.0470	0.0020	0.0476	0.0021	0.0012	13	-0.26	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0394	0.0471	0.0004	0.0476	0.0021	0.0012	13	-0.21	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0377	0.0475	0.0030	0.0476	0.0021	0.0012	13	-0.03	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0542	0.0476	0.0006	0.0476	0.0021	0.0012	13	0.02	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0433	0.0485	0.0010	0.0476	0.0021	0.0012	13	0.45	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0307	0.0490	0.0020	0.0476	0.0021	0.0012	13	0.68	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0444	0.0490	0.0000	0.0476	0.0021	0.0012	13	0.68	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0234	0.0500	0.0000	0.0476	0.0021	0.0012	13	1.16	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.05%)	0106	0.0516	0.0007	0.0476	0.0021	0.0012	13	1.89	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0476	0.0303	0.0003	0.0472	0.0058	0.0008	19	-2.90	Low	0
165.99	Acid Soluble Boron , Other (0.05%)	0255	0.0390	0.0000	0.0472	0.0058	0.0008	19	-1.40	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0472	0.0400	0.0000	0.0472	0.0058	0.0008	19	-1.23	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0486	0.0400	0.0000	0.0472	0.0058	0.0008	19	-1.23	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0515	0.0434	0.0022	0.0472	0.0058	0.0008	19	-0.64	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0423	0.0445	0.0010	0.0472	0.0058	0.0008	19	-0.46	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0419	0.0449	0.0010	0.0472	0.0058	0.0008	19	-0.39	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0524	0.0471	0.0042	0.0472	0.0058	0.0008	19	-0.01	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0360	0.0475	0.0010	0.0472	0.0058	0.0008	19	0.06	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0546	0.0489	0.0018	0.0472	0.0058	0.0008	19	0.30	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0200	0.0500	0.0000	0.0472	0.0058	0.0008	19	0.49	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0231	0.0500	0.0000	0.0472	0.0058	0.0008	19	0.49	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0291	0.0500	0.0000	0.0472	0.0058	0.0008	19	0.49	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0482	0.0500	0.0000	0.0472	0.0058	0.0008	19	0.49	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0501	0.0500	0.0000	0.0472	0.0058	0.0008	19	0.49	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0519	0.0505	0.0010	0.0472	0.0058	0.0008	19	0.57	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0368	0.0513	0.0005	0.0472	0.0058	0.0008	19	0.70	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0483	0.0547	0.0027	0.0472	0.0058	0.0008	19	1.29	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0527	0.0569	0.0003	0.0472	0.0058	0.0008	19	1.66	OK	0
165.99	Acid Soluble Boron , Other (0.05%)	0516	0.0650	0.0100	0.0472	0.0058	0.0008	19	3.06	High	1
165.99	Acid Soluble Boron , Other (0.05%)	0552	0.0000	0.0000	0.0472	0.0058	0.0008	19			4
171.00	Water Soluble Boron , AA, JAOAC 52.950 (%)	0540	0.0475	0.0050				1			0
171.10	Water Soluble Boron , Spectrophotometric (%)	0553	0.0465	0.0014				2			0
171.10	Water Soluble Boron , Spectrophotometric (%)	0535	0.0485	0.0010				2			0
171.99	Water Soluble Boron , Other (%)	0402	0.0441	0.0043				2			0
171.99	Water Soluble Boron , Other (%)	0444	0.0455	0.0010				2			0
181.00	Acid Soluble Cadmium , AA, test portion 2006... (ppm)	0550	0.0843	0.1114				2			0
181.00	Acid Soluble Cadmium , AA, test portion 2006... (ppm)	0498	0.1750	0.0100				2			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				
181.30	Acid Soluble Cadmium , ICP (ppm)	0255	0.0560	0.0000	0.1057	0.0415	0.0048	6	-1.07	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0389	0.0890	0.0020	0.1057	0.0415	0.0048	6	-0.36	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0501	0.1000	0.0000	0.1057	0.0415	0.0048	6	-0.12	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0394	0.1100	0.0000	0.1057	0.0415	0.0048	6	0.09	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0524	0.1110	0.0160	0.1057	0.0415	0.0048	6	0.11	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0102	1.043	0.0110	0.1057	0.0415	0.0048	6	20.11	NA	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0482	0.1650	0.0700	0.1057	0.0415	0.0048	6	1.27	NA	1
181.33	Acid Soluble Cadmium , ICP, 2017.02 (ppm)	0527	0.1458	0.0057				2			0
181.33	Acid Soluble Cadmium , ICP, 2017.02 (ppm)	0515	4.818	3.474				2			0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0368	0.0000	0.0000				0			4
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
181.99	Acid Soluble Cadmium , Other (ppm)	0506	0.0465	0.0030	0.1779	0.1594	0.0083	4	-0.82		0
181.99	Acid Soluble Cadmium , Other (ppm)	0405	0.0800	0.0200	0.1779	0.1594	0.0083	4	-0.61		0
181.99	Acid Soluble Cadmium , Other (ppm)	0519	0.1850	0.0100	0.1779	0.1594	0.0083	4	0.04		0
181.99	Acid Soluble Cadmium , Other (ppm)	0220	0.4000	0.0000	0.1779	0.1594	0.0083	4	1.39		0
181.99	Acid Soluble Cadmium , Other (ppm)	0200	0.0000	0.0000	0.1779	0.1594	0.0083	4			4
191.00	Acid Soluble Chromium , AA, test portion 200... (ppm)	0550	3.650	2.140				2			0
191.00	Acid Soluble Chromium , AA, test portion 200... (ppm)	0498	6.360	0.4800				2			0
191.30	Acid Soluble Chromium , ICP (ppm)	0524	7.745	0.0100	11.25	2.812	0.7589	8	-1.14	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0482	9.400	1.200	11.25	2.812	0.7589	8	-0.60	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	9.550	0.3000	11.25	2.812	0.7589	8	-0.55	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0444	10.82	0.6900	11.25	2.812	0.7589	8	-0.14	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0394	11.40	0.4000	11.25	2.812	0.7589	8	0.05	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0501	11.93	0.0900	11.25	2.812	0.7589	8	0.22	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0102	13.70	0.7510	11.25	2.812	0.7589	8	0.80	NA	0
191.30	Acid Soluble Chromium , ICP (ppm)	0389	17.68	2.630	11.25	2.812	0.7589	8	2.09	NA	0
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0527	11.49	0.0948	14.02	2.893	1.821	3	-0.87		0
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0037	13.39	0.0620	14.02	2.893	1.821	3	-0.22		0
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0515	17.18	5.307	14.02	2.893	1.821	3	1.09		0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0368	12.76	1.376				2			0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0515	15.02	3.228				2			0
191.99	Acid Soluble Chromium , Other (ppm)	0506	0.0810	0.0080	9.203	6.709	0.0448	5	-1.19		0
191.99	Acid Soluble Chromium , Other (ppm)	0519	4.545	0.0100	9.203	6.709	0.0448	5	-0.61		0
191.99	Acid Soluble Chromium , Other (ppm)	0405	11.00	0.0000	9.203	6.709	0.0448	5	0.23		0
191.99	Acid Soluble Chromium , Other (ppm)	0476	14.99	0.0060	9.203	6.709	0.0448	5	0.75		0
191.99	Acid Soluble Chromium , Other (ppm)	0220	15.40	0.2000	9.203	6.709	0.0448	5	0.81		0
191.99	Acid Soluble Chromium , Other (ppm)	0200	0.0000	0.0000	9.203	6.709	0.0448	5			4
202.30	Acid Soluble Cobalt , ICP (ppm)	0389	1.062	0.1360	1.662	0.4354	0.1379	5	-1.38		0
202.30	Acid Soluble Cobalt , ICP (ppm)	0482	1.475	0.1500	1.662	0.4354	0.1379	5	-0.43		0
202.30	Acid Soluble Cobalt , ICP (ppm)	0096	1.630	0.0600	1.662	0.4354	0.1379	5	-0.07		0
202.30	Acid Soluble Cobalt , ICP (ppm)	0524	1.952	0.1427	1.662	0.4354	0.1379	5	0.67		0
202.30	Acid Soluble Cobalt , ICP (ppm)	0102	2.190	0.2010	1.662	0.4354	0.1379	5	1.21		0
202.32	Acid Soluble Cobalt , ICP, 2006.03 (ppm)	0423	1.865	0.0700				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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202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0527	2.318	0.0110	3.179	1.306	1.319	3	-0.66		0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0037	2.538	0.0390	3.179	1.306	1.319	3	-0.49		0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0515	4.681	3.908	3.179	1.306	1.319	3	1.15		0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0501	2.140	0.0000	2.444	0.2831	0.3061	3	-1.08		0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	2.494	0.5470	2.444	0.2831	0.3061	3	0.17		0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0368	2.700	0.3714	2.444	0.2831	0.3061	3	0.90		0
202.99	Acid Soluble Cobalt , Other (ppm)	0506	1.460	0.3600	1.851	0.3979	0.1174	6	-0.87	OK	0
202.99	Acid Soluble Cobalt , Other (ppm)	0255	1.465	0.0240	1.851	0.3979	0.1174	6	-0.86	OK	0
202.99	Acid Soluble Cobalt , Other (ppm)	0519	1.830	0.0200	1.851	0.3979	0.1174	6	-0.05	OK	0
202.99	Acid Soluble Cobalt , Other (ppm)	0476	1.899	0.2006	1.851	0.3979	0.1174	6	0.11	OK	0
202.99	Acid Soluble Cobalt , Other (ppm)	0405	2.100	0.0000	1.851	0.3979	0.1174	6	0.56	OK	0
202.99	Acid Soluble Cobalt , Other (ppm)	0220	2.350	0.1000	1.851	0.3979	0.1174	6	1.12	OK	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0029	0.0317	0.0059	0.0387	0.0086	0.0026	10	-0.76	OK	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0531	0.0320	0.0040	0.0387	0.0086	0.0026	10	-0.72	OK	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0540	0.0325	0.0030	0.0387	0.0086	0.0026	10	-0.67	OK	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0535	0.0335	0.0030	0.0387	0.0086	0.0026	10	-0.56	OK	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0550	0.0345	0.0054	0.0387	0.0086	0.0026	10	-0.45	OK	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0105	0.0371	0.0010	0.0387	0.0086	0.0026	10	-0.17	OK	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0040	0.0387	0.0003	0.0387	0.0086	0.0026	10	-0.01	OK	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0534	0.0455	0.0030	0.0387	0.0086	0.0026	10	0.73	OK	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0200	0.0500	0.0000	0.0387	0.0086	0.0026	10	1.22	High	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0498	0.3000	0.0000	0.0387	0.0086	0.0026	10	28.13	High	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0553	0.2019	0.3303	0.0387	0.0086	0.0026	10	17.56	High	1
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0234	0.0300	0.0200	0.0359	0.0042	0.0030	17	-1.41	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0354	0.0300	0.0000	0.0359	0.0042	0.0030	17	-1.41	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0472	0.0300	0.0000	0.0359	0.0042	0.0030	17	-1.41	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0324	0.0330	0.0020	0.0359	0.0042	0.0030	17	-0.69	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0433	0.0335	0.0010	0.0359	0.0042	0.0030	17	-0.57	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0419	0.0346	0.0019	0.0359	0.0042	0.0030	17	-0.32	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0102	0.0348	0.0077	0.0359	0.0042	0.0030	17	-0.27	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0360	0.0353	0.0002	0.0359	0.0042	0.0030	17	-0.14	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0255	0.0370	0.0120	0.0359	0.0042	0.0030	17	0.27	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0444	0.0370	0.0020	0.0359	0.0042	0.0030	17	0.27	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0483	0.0373	0.0014	0.0359	0.0042	0.0030	17	0.34	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0377	0.0375	0.0010	0.0359	0.0042	0.0030	17	0.38	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0096	0.0390	0.0002	0.0359	0.0042	0.0030	17	0.74	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0231	0.0400	0.0000	0.0359	0.0042	0.0030	17	0.98	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0371	0.0400	0.0000	0.0359	0.0042	0.0030	17	0.98	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0482	0.0400	0.0000	0.0359	0.0042	0.0030	17	0.98	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0402	0.0413	0.0013	0.0359	0.0042	0.0030	17	1.28	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0552	0.0150	0.0300	0.0359	0.0042	0.0030	17			4
221.32	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0220	0.0350	0.0020	0.0355	0.0007	0.0010	4	-0.74		0
221.32	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0028	0.0352	0.0006	0.0355	0.0007	0.0010	4	-0.44		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				
221.32	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0394	0.0353	0.0004	0.0355	0.0007	0.0010	4	-0.29		0
221.32	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0423	0.0365	0.0010	0.0355	0.0007	0.0010	4	1.47		0
221.33	Acid Soluble Copper , ICP, 2017.02 (0.05%)	0486	0.0300	0.0000	0.0356	0.0030	0.0008	7	-1.67	OK	0
221.33	Acid Soluble Copper , ICP, 2017.02 (0.05%)	0043	0.0340	0.0000	0.0356	0.0030	0.0008	7	-0.47	OK	0
221.33	Acid Soluble Copper , ICP, 2017.02 (0.05%)	0546	0.0350	0.0004	0.0356	0.0030	0.0008	7	-0.17	OK	0
221.33	Acid Soluble Copper , ICP, 2017.02 (0.05%)	0515	0.0355	0.0011	0.0356	0.0030	0.0008	7	-0.04	OK	0
221.33	Acid Soluble Copper , ICP, 2017.02 (0.05%)	0527	0.0364	0.0027	0.0356	0.0030	0.0008	7	0.23	OK	0
221.33	Acid Soluble Copper , ICP, 2017.02 (0.05%)	0106	0.0382	0.0014	0.0356	0.0030	0.0008	7	0.79	OK	0
221.33	Acid Soluble Copper , ICP, 2017.02 (0.05%)	0037	0.0390	0.0000	0.0356	0.0030	0.0008	7	1.02	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0476	0.0292	0.0009	0.0350	0.0049	0.0012	13	-1.19	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0291	0.0300	0.0000	0.0350	0.0049	0.0012	13	-1.02	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0481	0.0300	0.0000	0.0350	0.0049	0.0012	13	-1.02	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0523	0.0315	0.0010	0.0350	0.0049	0.0012	13	-0.71	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0524	0.0325	0.0008	0.0350	0.0049	0.0012	13	-0.51	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0389	0.0330	0.0000	0.0350	0.0049	0.0012	13	-0.41	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0515	0.0354	0.0025	0.0350	0.0049	0.0012	13	0.07	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0405	0.0360	0.0040	0.0350	0.0049	0.0012	13	0.20	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0506	0.0375	0.0010	0.0350	0.0049	0.0012	13	0.50	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0368	0.0379	0.0003	0.0350	0.0049	0.0012	13	0.57	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0027	0.0400	0.0000	0.0350	0.0049	0.0012	13	1.01	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0516	0.0400	0.0000	0.0350	0.0049	0.0012	13	1.01	OK	0
221.99	Acid Soluble Copper , Other (0.05%)	0519	0.0445	0.0050	0.0350	0.0049	0.0012	13	1.92	High	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	0498	0.0800	0.0000	0.1452	0.0566	0.0084	10	-1.07	Low	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	0531	0.1050	0.0100	0.1452	0.0566	0.0084	10	-0.66	Low	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	0535	0.1050	0.0100	0.1452	0.0566	0.0084	10	-0.66	Low	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	0540	0.1250	0.0100	0.1452	0.0566	0.0084	10	-0.33	Low	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	0040	0.1400	0.0000	0.1452	0.0566	0.0084	10	-0.09	OK	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	0029	0.1401	0.0076	0.1452	0.0566	0.0084	10	-0.08	OK	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	0534	0.1450	0.0100	0.1452	0.0566	0.0084	10	0.00	OK	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	0105	0.1520	0.0060	0.1452	0.0566	0.0084	10	0.11	OK	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	0553	0.2580	0.0000	0.1452	0.0566	0.0084	10	1.85	High	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.1%)	0200	0.3850	0.0300	0.1452	0.0566	0.0084	10	3.94	High	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0402	0.0988	0.0052	0.1368	0.0125	0.0048	18	-3.04	Low	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0371	0.1200	0.0000	0.1368	0.0125	0.0048	18	-1.35	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0354	0.1250	0.0100	0.1368	0.0125	0.0048	18	-0.95	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0255	0.1260	0.0040	0.1368	0.0125	0.0048	18	-0.87	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0291	0.1300	0.0000	0.1368	0.0125	0.0048	18	-0.55	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0433	0.1300	0.0040	0.1368	0.0125	0.0048	18	-0.55	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0324	0.1310	0.0100	0.1368	0.0125	0.0048	18	-0.46	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0444	0.1350	0.0100	0.1368	0.0125	0.0048	18	-0.14	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0360	0.1370	0.0020	0.1368	0.0125	0.0048	18	0.02	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0483	0.1395	0.0010	0.1368	0.0125	0.0048	18	0.22	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0096	0.1400	0.0000	0.1368	0.0125	0.0048	18	0.26	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0472	0.1400	0.0000	0.1368	0.0125	0.0048	18	0.26	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0377	0.1410	0.0060	0.1368	0.0125	0.0048	18	0.34	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0102	0.1429	0.0153	0.1368	0.0125	0.0048	18	0.48	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0419	0.1460	0.0040	0.1368	0.0125	0.0048	18	0.74	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0482	0.1500	0.0000	0.1368	0.0125	0.0048	18	1.06	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0390	0.1568	0.0146	0.1368	0.0125	0.0048	18	1.60	High	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0231	0.1600	0.0000	0.1368	0.0125	0.0048	18	1.86	High	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.1%)	0552	0.1600	0.0600	0.1368	0.0125	0.0048	18	1.86	High	1
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (0.1%)	0234	0.1000	0.0000	0.1271	0.0183	0.0019	4	-1.48		0
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (0.1%)	0423	0.1330	0.0020	0.1271	0.0183	0.0019	4	0.32		0
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (0.1%)	0394	0.1360	0.0027	0.1271	0.0183	0.0019	4	0.48		0
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (0.1%)	0028	0.1395	0.0030	0.1271	0.0183	0.0019	4	0.68		0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	0397	0.1239	0.0037	0.1316	0.0078	0.0019	8	-0.91	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	0106	0.1269	0.0020	0.1316	0.0078	0.0019	8	-0.55	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	0546	0.1275	0.0050	0.1316	0.0078	0.0019	8	-0.48	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	0043	0.1300	0.0000	0.1316	0.0078	0.0019	8	-0.18	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	0177	0.1300	0.0018	0.1316	0.0078	0.0019	8	-0.18	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	0486	0.1300	0.0000	0.1316	0.0078	0.0019	8	-0.18	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	0527	0.1410	0.0019	0.1316	0.0078	0.0019	8	1.11	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	0037	0.1475	0.0010	0.1316	0.0078	0.0019	8	1.88	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.1%)	0515	0.1866	0.0539	0.1316	0.0078	0.0019	8	6.47	High	1
241.99	Acid Soluble Iron , Other (0.1%)	0476	0.0881	0.0038	0.1236	0.0201	0.0031	13	-1.76	Low	0
241.99	Acid Soluble Iron , Other (0.1%)	0519	0.1015	0.0010	0.1236	0.0201	0.0031	13	-1.10	Low	0
241.99	Acid Soluble Iron , Other (0.1%)	0501	0.1050	0.0100	0.1236	0.0201	0.0031	13	-0.93	Low	0
241.99	Acid Soluble Iron , Other (0.1%)	0506	0.1055	0.0010	0.1236	0.0201	0.0031	13	-0.90	Low	0
241.99	Acid Soluble Iron , Other (0.1%)	0481	0.1200	0.0000	0.1236	0.0201	0.0031	13	-0.18	OK	0
241.99	Acid Soluble Iron , Other (0.1%)	0524	0.1208	0.0005	0.1236	0.0201	0.0031	13	-0.14	OK	0
241.99	Acid Soluble Iron , Other (0.1%)	0523	0.1260	0.0040	0.1236	0.0201	0.0031	13	0.12	OK	0
241.99	Acid Soluble Iron , Other (0.1%)	0389	0.1275	0.0010	0.1236	0.0201	0.0031	13	0.19	OK	0
241.99	Acid Soluble Iron , Other (0.1%)	0368	0.1386	0.0073	0.1236	0.0201	0.0031	13	0.74	OK	0
241.99	Acid Soluble Iron , Other (0.1%)	0405	0.1400	0.0000	0.1236	0.0201	0.0031	13	0.81	OK	0
241.99	Acid Soluble Iron , Other (0.1%)	0516	0.1400	0.0000	0.1236	0.0201	0.0031	13	0.81	OK	0
241.99	Acid Soluble Iron , Other (0.1%)	0515	0.1406	0.0104	0.1236	0.0201	0.0031	13	0.84	OK	0
241.99	Acid Soluble Iron , Other (0.1%)	0027	0.1485	0.0010	0.1236	0.0201	0.0031	13	1.23	High	0
251.00	Acid Soluble Lead , AA, test portion 2006.03... (ppm)	0498	0.2500	0.0200				2			0
251.00	Acid Soluble Lead , AA, test portion 2006.03... (ppm)	0550	1.295	0.3700				2			0
251.30	Acid Soluble Lead , ICP (ppm)	0255	0.9360	0.0440	1.860	0.8759	0.0561	6	-0.94	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0389	1.565	0.1080	1.860	0.8759	0.0561	6	-0.30	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0501	1.590	0.0160	1.860	0.8759	0.0561	6	-0.27	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0524	1.610	0.0688	1.860	0.8759	0.0561	6	-0.25	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0394	2.285	0.0300	1.860	0.8759	0.0561	6	0.43	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0482	3.895	0.0700	1.860	0.8759	0.0561	6	2.07	NA	0
251.30	Acid Soluble Lead , ICP (ppm)	0102	5.394	2.207	1.860	0.8759	0.0561	6	3.59	NA	1

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			Value	Range	Rob Mean	Rob SD	R-bar				
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	0527	1.519	0.0930				2			0
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	0515	4.020	0.6810				2			0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	4.509	1.491				1			0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0368	1.022	2.044				1			4
251.99	Acid Soluble Lead , Other (ppm)	0200	0.0250	0.0100	1.374	0.3163	0.0434	6	-3.80	NA	0
251.99	Acid Soluble Lead , Other (ppm)	0506	1.300	0.1400	1.374	0.3163	0.0434	6	-0.21	NA	0
251.99	Acid Soluble Lead , Other (ppm)	0519	1.395	0.0100	1.374	0.3163	0.0434	6	0.06	NA	0
251.99	Acid Soluble Lead , Other (ppm)	0476	1.399	0.0005	1.374	0.3163	0.0434	6	0.07	NA	0
251.99	Acid Soluble Lead , Other (ppm)	0405	1.500	0.0000	1.374	0.3163	0.0434	6	0.36	NA	0
251.99	Acid Soluble Lead , Other (ppm)	0220	1.750	0.1000	1.374	0.3163	0.0434	6	1.06	NA	0
261.11	Acid Soluble Manganese , AA, total Mn (0.25%)	0498	0.2500	0.0400				2			0
261.11	Acid Soluble Manganese , AA, total Mn (0.25%)	0550	0.2595	0.0010				2			0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0535	0.2150	0.0100	0.2539	0.0344	0.0108	8	-1.03	Low	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0540	0.2200	0.0400	0.2539	0.0344	0.0108	8	-0.90	Low	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0534	0.2300	0.0000	0.2539	0.0344	0.0108	8	-0.64	OK	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0531	0.2500	0.0200	0.2539	0.0344	0.0108	8	-0.10	OK	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0029	0.2598	0.0014	0.2539	0.0344	0.0108	8	0.16	OK	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0105	0.2790	0.0080	0.2539	0.0344	0.0108	8	0.67	OK	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0040	0.2815	0.0010	0.2539	0.0344	0.0108	8	0.73	OK	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0553	0.2960	0.0060	0.2539	0.0344	0.0108	8	1.12	High	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0433	0.2545	0.0010	0.2693	0.0161	0.0136	9	-0.85	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0419	0.2546	0.0047	0.2693	0.0161	0.0136	9	-0.85	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0291	0.2550	0.0100	0.2693	0.0161	0.0136	9	-0.82	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0354	0.2650	0.0500	0.2693	0.0161	0.0136	9	-0.25	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0102	0.2678	0.0373	0.2693	0.0161	0.0136	9	-0.09	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0472	0.2700	0.0000	0.2693	0.0161	0.0136	9	0.04	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0096	0.2769	0.0011	0.2693	0.0161	0.0136	9	0.43	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0390	0.2869	0.0083	0.2693	0.0161	0.0136	9	1.00	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0307	0.3050	0.0100	0.2693	0.0161	0.0136	9	2.05	High	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0324	0.2670	0.0060	0.2801	0.0176	0.0043	4	-0.75		0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0360	0.2685	0.0010	0.2801	0.0176	0.0043	4	-0.66		0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0234	0.2800	0.0000	0.2801	0.0176	0.0043	4	-0.01		0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0482	0.3050	0.0100	0.2801	0.0176	0.0043	4	1.42		0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0371	0.2450	0.0100	0.2747	0.0113	0.0107	7	-2.38	OK	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0444	0.2650	0.0100	0.2747	0.0113	0.0107	7	-0.78	OK	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0552	0.2750	0.0300	0.2747	0.0113	0.0107	7	0.02	OK	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0483	0.2765	0.0030	0.2747	0.0113	0.0107	7	0.14	OK	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0377	0.2810	0.0100	0.2747	0.0113	0.0107	7	0.50	OK	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0402	0.2828	0.0017	0.2747	0.0113	0.0107	7	0.64	OK	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0231	0.2850	0.0100	0.2747	0.0113	0.0107	7	0.82	OK	0
261.34	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0394	0.2530	0.0014	0.2624	0.0106	0.0069	4	-0.88		0
261.34	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0542	0.2534	0.0080	0.2624	0.0106	0.0069	4	-0.85		0
261.34	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0028	0.2715	0.0150	0.2624	0.0106	0.0069	4	0.87		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				
261.34	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0423	0.2715	0.0030	0.2624	0.0106	0.0069	4	0.87		0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	0486	0.2400	0.0000	0.2614	0.0153	0.0034	8	-1.28	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	0043	0.2500	0.0000	0.2614	0.0153	0.0034	8	-0.68	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	0397	0.2560	0.0022	0.2614	0.0153	0.0034	8	-0.32	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	0546	0.2577	0.0056	0.2614	0.0153	0.0034	8	-0.22	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	0177	0.2646	0.0063	0.2614	0.0153	0.0034	8	0.19	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	0106	0.2672	0.0017	0.2614	0.0153	0.0034	8	0.34	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	0527	0.2732	0.0051	0.2614	0.0153	0.0034	8	0.70	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	0037	0.2830	0.0060	0.2614	0.0153	0.0034	8	1.29	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.25%)	0515	0.2799	0.0346	0.2614	0.0153	0.0034	8	1.10	OK	1
261.99	Acid Soluble Manganese , Other (0.25%)	0481	0.1850	0.0100	0.2480	0.0294	0.0075	13	-2.15	Low	0
261.99	Acid Soluble Manganese , Other (0.25%)	0519	0.2000	0.0020	0.2480	0.0294	0.0075	13	-1.64	Low	0
261.99	Acid Soluble Manganese , Other (0.25%)	0476	0.2189	0.0090	0.2480	0.0294	0.0075	13	-0.99	OK	0
261.99	Acid Soluble Manganese , Other (0.25%)	0524	0.2356	0.0034	0.2480	0.0294	0.0075	13	-0.42	OK	0
261.99	Acid Soluble Manganese , Other (0.25%)	0255	0.2390	0.0160	0.2480	0.0294	0.0075	13	-0.31	OK	0
261.99	Acid Soluble Manganese , Other (0.25%)	0389	0.2525	0.0010	0.2480	0.0294	0.0075	13	0.15	OK	0
261.99	Acid Soluble Manganese , Other (0.25%)	0501	0.2535	0.0010	0.2480	0.0294	0.0075	13	0.19	OK	0
261.99	Acid Soluble Manganese , Other (0.25%)	0405	0.2580	0.0180	0.2480	0.0294	0.0075	13	0.34	OK	0
261.99	Acid Soluble Manganese , Other (0.25%)	0506	0.2645	0.0030	0.2480	0.0294	0.0075	13	0.56	OK	0
261.99	Acid Soluble Manganese , Other (0.25%)	0516	0.2700	0.0000	0.2480	0.0294	0.0075	13	0.75	OK	0
261.99	Acid Soluble Manganese , Other (0.25%)	0515	0.2707	0.0109	0.2480	0.0294	0.0075	13	0.77	OK	0
261.99	Acid Soluble Manganese , Other (0.25%)	0523	0.2745	0.0110	0.2480	0.0294	0.0075	13	0.90	OK	0
261.99	Acid Soluble Manganese , Other (0.25%)	0027	0.2790	0.0120	0.2480	0.0294	0.0075	13	1.06	High	0
261.99	Acid Soluble Manganese , Other (0.25%)	0368	0.2464	0.0412	0.2480	0.0294	0.0075	13	-0.05	OK	1
271.00	Water Soluble Manganese , AA (%)	0027	0.2435	0.0050				1			0
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	0444	0.1700	0.0000				1			0
281.00	Acid Soluble Mercury , AA (ppm)	0550	0.0004	0.0000				2			0
281.00	Acid Soluble Mercury , AA (ppm)	0506	0.0330	0.0180				2			0
281.30	Acid Soluble Mercury , ICP (ppm)	0527	0.0174	0.0048				2			0
281.30	Acid Soluble Mercury , ICP (ppm)	0394	0.0200	0.0200				2			0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.0000	0.0000				2			4
281.99	Acid Soluble Mercury , Other (ppm)	0519	0.0200	0.0000				1			0
289.00	Acid Soluble Molybdenum , AA, test portion 2... (20ppm)	0550	29.68	0.0500				1			0
289.30	Acid Soluble Molybdenum , ICP (20ppm)	0255	27.90	1.550	38.16	8.935	4.625	9	-1.06	OK	0
289.30	Acid Soluble Molybdenum , ICP (20ppm)	0516	30.00	20.00	38.16	8.935	4.625	9	-0.84	OK	0
289.30	Acid Soluble Molybdenum , ICP (20ppm)	0433	31.60	0.4800	38.16	8.935	4.625	9	-0.68	OK	0
289.30	Acid Soluble Molybdenum , ICP (20ppm)	0419	35.00	2.000	38.16	8.935	4.625	9	-0.33	OK	0
289.30	Acid Soluble Molybdenum , ICP (20ppm)	0524	39.74	1.393	38.16	8.935	4.625	9	0.16	OK	0
289.30	Acid Soluble Molybdenum , ICP (20ppm)	0444	40.00	0.0000	38.16	8.935	4.625	9	0.19	OK	0
289.30	Acid Soluble Molybdenum , ICP (20ppm)	0234	40.50	1.000	38.16	8.935	4.625	9	0.24	OK	0
289.30	Acid Soluble Molybdenum , ICP (20ppm)	0102	47.15	15.10	38.16	8.935	4.625	9	0.93	OK	0
289.30	Acid Soluble Molybdenum , ICP (20ppm)	0096	64.25	0.1000	38.16	8.935	4.625	9	2.70	High	0
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (20ppm)	0394	34.00	0.0000				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				
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (20ppm)	0486	28.50	1.000	37.34	6.379	0.4278	6	-1.23	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (20ppm)	0423	34.39	0.8200	37.34	6.379	0.4278	6	-0.41	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (20ppm)	0546	35.58	0.0800	37.34	6.379	0.4278	6	-0.25	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (20ppm)	0037	40.64	0.6170	37.34	6.379	0.4278	6	0.46	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (20ppm)	0527	40.95	0.0497	37.34	6.379	0.4278	6	0.50	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (20ppm)	0106	44.00	0.0000	37.34	6.379	0.4278	6	0.93	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (20ppm)	0515	39.27	6.728	37.34	6.379	0.4278	6	0.27	OK	1
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (20ppm)	0515	39.67	3.775				2			0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (20ppm)	0368	42.49	2.439				2			0
289.99	Acid Soluble Molybdenum , Other (20ppm)	0519	18.92	0.0600	33.85	11.81	2.594	5	-1.26		0
289.99	Acid Soluble Molybdenum , Other (20ppm)	0476	24.79	2.009	33.85	11.81	2.594	5	-0.77		0
289.99	Acid Soluble Molybdenum , Other (20ppm)	0405	37.50	3.000	33.85	11.81	2.594	5	0.31		0
289.99	Acid Soluble Molybdenum , Other (20ppm)	0220	40.00	2.000	33.85	11.81	2.594	5	0.52		0
289.99	Acid Soluble Molybdenum , Other (20ppm)	0506	48.05	5.900	33.85	11.81	2.594	5	1.20		0
291.00	Acid Soluble Nickel , AA, test portion 2006.... (ppm)	0550	5.050	8.860				1			0
291.30	Acid Soluble Nickel , ICP (ppm)	0444	1.560	0.0800	4.028	2.188	0.2471	6	-1.00	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0389	1.885	0.4350	4.028	2.188	0.2471	6	-0.87	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0524	4.356	0.1277	4.028	2.188	0.2471	6	0.13	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0482	4.400	0.6000	4.028	2.188	0.2471	6	0.15	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0394	5.870	0.0400	4.028	2.188	0.2471	6	0.75	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0096	6.100	0.2000	4.028	2.188	0.2471	6	0.84	NA	0
291.30	Acid Soluble Nickel , ICP (ppm)	0102	5.606	2.433	4.028	2.188	0.2471	6	0.64	NA	1
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	0527	6.978	0.3247	8.262	1.604	1.349	3	-0.80		0
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	0037	7.747	0.0240	8.262	1.604	1.349	3	-0.32		0
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	0515	10.06	3.697	8.262	1.604	1.349	3	1.12		0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0368	6.969	0.9220				2			0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	7.360	0.4520				2			0
291.99	Acid Soluble Nickel , Other (ppm)	0519	3.985	0.0100	6.036	2.007	0.3690	5	-0.89		0
291.99	Acid Soluble Nickel , Other (ppm)	0255	4.947	0.7330	6.036	2.007	0.3690	5	-0.47		0
291.99	Acid Soluble Nickel , Other (ppm)	0476	5.797	0.8018	6.036	2.007	0.3690	5	-0.10		0
291.99	Acid Soluble Nickel , Other (ppm)	0405	6.150	0.1000	6.036	2.007	0.3690	5	0.05		0
291.99	Acid Soluble Nickel , Other (ppm)	0220	9.300	0.2000	6.036	2.007	0.3690	5	1.42		0
291.99	Acid Soluble Nickel , Other (ppm)	0506	35.90	3.600	6.036	2.007	0.3690	5	12.99		1
301.30	Acid Soluble Selenium , ICP (ppm)	0394	0.0700	0.0200	1.389	1.201	0.8283	3	-1.10		0
301.30	Acid Soluble Selenium , ICP (ppm)	0524	1.678	2.385	1.389	1.201	0.8283	3	0.24		0
301.30	Acid Soluble Selenium , ICP (ppm)	0501	2.420	0.0800	1.389	1.201	0.8283	3	0.86		0
301.33	Acid Soluble Selenium , ICP, 2017.02 (ppm)	0527	1.831	0.1801				2			0
301.33	Acid Soluble Selenium , ICP, 2017.02 (ppm)	0515	6.536	6.699				2			0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C... (ppm)	0515	3.946	0.4070				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	0.4000	0.0000	2.771	3.245	0.1185	4	-0.73		0
301.99	Acid Soluble Selenium , Other (ppm)	0519	1.105	0.0100	2.771	3.245	0.1185	4	-0.51		0
301.99	Acid Soluble Selenium , Other (ppm)	0476	2.049	0.2990	2.771	3.245	0.1185	4	-0.22		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				
301.99	Acid Soluble Selenium , Other (ppm)	0255	7.532	0.1650	2.771	3.245	0.1185	4	1.47		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0423	0.2955	0.0010	0.3650	0.0653	0.0494	3	-1.06		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0515	0.3745	0.1454	0.3650	0.0653	0.0494	3	0.15		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0527	0.4251	0.0019	0.3650	0.0653	0.0494	3	0.92		0
311.99	Sodium, Other (%)	0354	0.2850	0.0500	0.2867	0.0029	0.0200	3	-0.58		0
311.99	Sodium, Other (%)	0482	0.2850	0.0100	0.2867	0.0029	0.0200	3	-0.58		0
311.99	Sodium, Other (%)	0096	0.2900	0.0000	0.2867	0.0029	0.0200	3	1.15		0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0535	0.0395	0.0010	0.0419	0.0025	0.0014	10	-0.93	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0540	0.0395	0.0030	0.0419	0.0025	0.0014	10	-0.93	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0169	0.0400	0.0020	0.0419	0.0025	0.0014	10	-0.73	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0498	0.0400	0.0000	0.0419	0.0025	0.0014	10	-0.73	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0029	0.0404	0.0014	0.0419	0.0025	0.0014	10	-0.57	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0531	0.0425	0.0010	0.0419	0.0025	0.0014	10	0.25	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0105	0.0433	0.0022	0.0419	0.0025	0.0014	10	0.57	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0553	0.0437	0.0000	0.0419	0.0025	0.0014	10	0.73	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0040	0.0440	0.0000	0.0419	0.0025	0.0014	10	0.84	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0534	0.0465	0.0030	0.0419	0.0025	0.0014	10	1.83	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0550	0.0512	0.0161	0.0419	0.0025	0.0014	10	3.66	High	1
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0200	0.5000	0.0000	0.0419	0.0025	0.0014	10	180.44	High	2
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0234	0.0350	0.0100	0.0429	0.0038	0.0020	22	-2.08	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0072	0.0375	0.0010	0.0429	0.0038	0.0020	22	-1.42	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0291	0.0400	0.0000	0.0429	0.0038	0.0020	22	-0.76	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0292	0.0400	0.0000	0.0429	0.0038	0.0020	22	-0.76	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0354	0.0400	0.0000	0.0429	0.0038	0.0020	22	-0.76	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0371	0.0400	0.0000	0.0429	0.0038	0.0020	22	-0.76	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0472	0.0400	0.0000	0.0429	0.0038	0.0020	22	-0.76	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0482	0.0400	0.0000	0.0429	0.0038	0.0020	22	-0.76	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0433	0.0410	0.0000	0.0429	0.0038	0.0020	22	-0.49	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0419	0.0419	0.0003	0.0429	0.0038	0.0020	22	-0.27	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0444	0.0425	0.0010	0.0429	0.0038	0.0020	22	-0.10	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0360	0.0430	0.0020	0.0429	0.0038	0.0020	22	0.04	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0096	0.0445	0.0006	0.0429	0.0038	0.0020	22	0.43	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0255	0.0445	0.0030	0.0429	0.0038	0.0020	22	0.43	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0377	0.0445	0.0010	0.0429	0.0038	0.0020	22	0.43	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0231	0.0450	0.0100	0.0429	0.0038	0.0020	22	0.56	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0307	0.0455	0.0010	0.0429	0.0038	0.0020	22	0.70	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0102	0.0461	0.0016	0.0429	0.0038	0.0020	22	0.86	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0390	0.0467	0.0021	0.0429	0.0038	0.0020	22	1.00	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0483	0.0468	0.0041	0.0429	0.0038	0.0020	22	1.03	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0324	0.0480	0.0020	0.0429	0.0038	0.0020	22	1.36	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0402	0.0504	0.0044	0.0429	0.0038	0.0020	22	2.00	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0552	0.0000	0.0000	0.0429	0.0038	0.0020	22			4
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0542	0.0416	0.0006	0.0438	0.0017	0.0007	4	-1.24		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				
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0028	0.0432	0.0001	0.0438	0.0017	0.0007	4	-0.35		0
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0394	0.0448	0.0011	0.0438	0.0017	0.0007	4	0.58		0
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0423	0.0455	0.0010	0.0438	0.0017	0.0007	4	1.01		0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	0106	0.0371	0.0001	0.0419	0.0031	0.0004	9	-1.48	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	0397	0.0390	0.0010	0.0419	0.0031	0.0004	9	-0.89	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	0486	0.0400	0.0000	0.0419	0.0031	0.0004	9	-0.59	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	0043	0.0415	0.0010	0.0419	0.0031	0.0004	9	-0.13	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	0515	0.0424	0.0011	0.0419	0.0031	0.0004	9	0.12	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	0546	0.0435	0.0003	0.0419	0.0031	0.0004	9	0.45	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	0023	0.0440	0.0000	0.0419	0.0031	0.0004	9	0.62	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	0527	0.0449	0.0001	0.0419	0.0031	0.0004	9	0.88	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.05%)	0037	0.0450	0.0000	0.0419	0.0031	0.0004	9	0.92	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0476	0.0353	0.0030	0.0423	0.0031	0.0026	13	-2.23	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0523	0.0385	0.0030	0.0423	0.0031	0.0026	13	-1.21	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0481	0.0400	0.0000	0.0423	0.0031	0.0026	13	-0.73	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0389	0.0404	0.0001	0.0423	0.0031	0.0026	13	-0.62	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0027	0.0405	0.0010	0.0423	0.0031	0.0026	13	-0.57	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0524	0.0423	0.0014	0.0423	0.0031	0.0026	13	0.01	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0506	0.0425	0.0010	0.0423	0.0031	0.0026	13	0.07	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0368	0.0432	0.0038	0.0423	0.0031	0.0026	13	0.30	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0405	0.0435	0.0030	0.0423	0.0031	0.0026	13	0.39	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0220	0.0441	0.0007	0.0423	0.0031	0.0026	13	0.57	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0516	0.0450	0.0100	0.0423	0.0031	0.0026	13	0.88	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0515	0.0451	0.0059	0.0423	0.0031	0.0026	13	0.89	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0519	0.0475	0.0010	0.0423	0.0031	0.0026	13	1.68	OK	0
321.99	Acid Soluble Zinc , Other (0.05%)	0501	0.4000	0.0000	0.0423	0.0031	0.0026	13	114.70	High	2
325.30	Water Soluble Zinc , ICP (%)	0444	0.0080	0.0040				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, 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.