

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 201211

Magnesium 36

Statistical Summary

Methods: 120

Labs Reporting: 92

Issue Date : 01/31/2021

Method Code	Analyte & Method Sample # 201211	# 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)	Horwitz %RSD
001.99	Ammoniacal N, Other (%)	3	3	0.4458	0.0688	0.4458		0.0688	0.0496	15.43%		0.0071	4.52%
002.99	Nitrate N, Other (%)	1		0.0265									
005.99	Urea N, Other (%)	2	2	1.141	1.052								
010.11	Total N, Modified Comprehensive (1%)	6	5	1.632	0.4600	1.632	0.4900	0.4600	0.2571	28.19%	2.19	0.0650	3.72%
010.12	Total N, Salicylic (1%)	2	2	1.121	1.575								
010.60	Total N, Combustion (1%)	57	54	2.290	0.1747	2.299	0.4900	0.0790	0.0134	3.44%	0.38	0.0563	3.53%
010.99	Total N, Other (1%)	15	15	2.028	0.4460	2.047	0.4900	0.4644	0.1499	22.68%	2.21	0.0701	3.59%
020.50	Total P2O5, ICP (%)	8	7	1.355	0.1970	1.355		0.2235	0.1056	16.49%		0.0221	3.82%
020.99	Total P2O5, Other (%)	1		1.610									
041.20	Direct Available P2O5, Spectrophotometric (%)	1		1.327									
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (%)	3	3	0.8250	0.6853	0.8250	0.6700	0.6853	0.4946	83.07%	2.38	0.0367	4.12%
041.50	Direct Available P2O5, ICP (%)	2	2	1.461	0.1680								
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (%)	1		1.302									
050.31	Soluble K2O, AA (Citrate) (%)	1		0.1000									
050.51	Soluble K2O, ICP (Citrate) (%)	2	2	0.3058	0.2415								
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	2	2	0.4325	0.0644								
050.99	Soluble K2O, Other (%)	9	7	0.4604	0.1062	0.4452	0.4100	0.0826	0.0390	18.55%	0.47	0.0131	4.52%
060.00	Water (Free), Vacuum Oven (%)	1		1.465									
060.99	Water (Free), Other (%)	1		1.747									
101.00	Acid Soluble Ca, AA, inorganic 965.09 (%)	1		0.8800									
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	5	5	3.829	6.253	3.829	0.3914	6.253	3.495	163.31%	37.22	0.0654	3.27%
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	1		0.8785									
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	6	6	0.8621	0.1022	0.8624	0.2431	0.0522	0.0266	6.06%	0.50	0.0340	4.09%
101.99	Acid Soluble Ca, Other (%)	2	2	1.060	0.4172								
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	10	10	38.68	7.833	36.24	1.0000	0.9783	0.3867	2.70%	2.28	0.4850	2.33%
121.03	Acid Soluble Mg, AA, 965.09, test portion 2006.03A-C w/dual acid (36%)	1		37.43									
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	22	20	36.50	2.886	36.42	1.0000	2.627	0.7344	7.21%	6.12	0.8928	2.33%
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (36%)	5	5	35.49	2.440	35.49	1.0000	2.440	1.364	6.87%	5.68	0.4782	2.34%
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	16	15	36.09	2.420	36.12	1.0000	1.716	0.5538	4.75%	4.00	0.8431	2.33%
121.70	Acid Soluble Mg, Titrimetric (EDTA) (36%)	5	5	36.84	0.5603	36.84	1.0000	0.5603	0.3132	1.52%	1.31	0.2200	2.32%
121.99	Acid Soluble Mg, Other (36%)	15	15	37.15	3.247	36.75	1.0000	1.890	0.6099	5.14%	4.40	0.6877	2.33%
131.00	Water Soluble Mg, AA (%)	1		49.03									
131.70	Water Soluble Mg, Titrimetric (EDTA) (%)	1		36.06									

Method Code	Analyte & Method Sample # 201211	# 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)	Horwitz %RSD
131.99	Water Soluble Mg, Other (%)	1		36.99									
143.99	Elemental S, Other (%)	7	7	4.802	0.3076	4.802		0.3488	0.1648	7.26%		0.1628	3.16%
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	6	6	4.882	0.1844	4.879		0.2023	0.1033	4.15%		0.1125	3.15%
145.99	Sulfate S, HCl soluble, Other (%)	3	3	4.932	0.7251	4.932		0.7251	0.5233	14.70%		0.1100	3.15%
146.00	Total S in Liquid, Gravimetric - sulfate, sulfite, thiosulfate, a... (6%)	1		4.925									
148.00	Total S, Combustion (6%)	7	7	4.903	0.1970	4.903	0.4452	0.2234	0.1055	4.56%	1.17	0.0731	3.15%
148.01	Total S, Gravimetric - sulfate and elemental (6%)	10	10	4.831	0.1373	4.829	0.4415	0.1510	0.0597	3.13%	0.80	0.0819	3.16%
148.07	Total S, ICP, test portion as in 2017.02 (6%)	16	16	5.082	0.6318	5.047	0.4523	0.6283	0.1963	12.45%	3.24	0.0765	3.13%
148.99	Total S, Other (6%)	17	16	5.071	0.4873	5.064	0.4532	0.5377	0.1680	10.62%	2.76	0.0828	3.13%
149.04	S - HNO3 soluble, ICP (%)	3	3	4.891	0.3287	4.891		0.3287	0.2372	6.72%		0.1121	3.15%
149.99	S - HNO3 soluble, Other (%)	1		5.860									
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid (ppm)	1		1.545									
151.30	Acid Soluble As, ICP (ppm)	5	5	2.304	0.2534	2.304		0.2534	0.1416	11.00%		0.0561	14.11%
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	1		2.050									
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	6	4	2.911	0.7068	2.911		0.7068	0.4418	24.28%		0.1173	13.62%
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	2	1	2.935									
151.99	Acid Soluble As, Other (ppm)	4	4	2.194	0.5758	2.194		0.5758	0.3599	26.25%		0.0325	14.21%
165.00	Acid Soluble B, Spectrophotometric (%)	1		0.1550									
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	5	5	0.1577	0.0113	0.1577	0.0267	0.0113	0.0063	7.18%	0.99	0.0055	5.28%
165.99	Acid Soluble B, Other (%)	9	8	0.1628	0.0251	0.1619	0.0273	0.0265	0.0117	16.38%	2.27	0.0083	5.26%
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	1		3.880									
181.30	Acid Soluble Cd, ICP (ppm)	9	9	0.9770	0.2143	0.9770		0.2431	0.1013	24.88%		0.0323	16.05%
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	1		0.7000									
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	5	3	1.415	0.3467	1.415		0.3467	0.2502	24.51%		0.1689	15.18%
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	2	2	6.773	7.750								
181.99	Acid Soluble Cd, Other (ppm)	3	3	0.8433	0.2580	0.8433		0.2580	0.1862	30.59%		0.0467	16.41%
190.00	Water Soluble Cl, Titrimetric (%)	1		0.6250									
191.00	Acid Soluble Cr, AA, test portion 2006.03 modified w/dual acid (ppm)	1		21.73									
191.30	Acid Soluble Cr, ICP (ppm)	8	8	64.33	36.78	55.12		15.45	6.828	28.03%		4.351	8.75%
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	5	5	63.79	12.52	63.79		12.52	6.996	19.62%		4.775	8.56%
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	2	2	62.04	4.482								
191.99	Acid Soluble Cr, Other (ppm)	3	3	62.48	2.133	62.48		2.133	1.540	3.41%		4.100	8.59%
202.30	Acid Soluble Co, ICP (ppm)	4	4	12.08	5.520	12.08	4.6233	5.520	3.450	45.71%	2.78	1.190	10.99%
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	2	2	14.85	1.199								
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	6	6	17.05	4.901	17.33	6.2000	4.872	2.486	28.11%	1.83	1.068	10.41%
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	2	2	17.08	10.08								
202.99	Acid Soluble Co, Other (ppm)	5	5	16.14	4.060	16.14	5.8435	4.060	2.269	25.15%	1.62	1.205	10.52%
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	2	2	0.0617	0.0010								
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	9	7	0.0780	0.0414	0.0702	0.0120	0.0266	0.0126	37.97%	5.17	0.0145	5.97%
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	4	4	0.0599	0.0042	0.0599	0.0110	0.0042	0.0026	7.03%	0.89	0.0046	6.11%
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	8	7	0.0591	0.0046	0.0597	0.0110	0.0039	0.0018	6.47%	0.82	0.0011	6.11%
221.99	Acid Soluble Cu, Other (%)	7	6	0.0610	0.0071	0.0604	0.0110	0.0068	0.0035	11.19%	1.43	0.0056	6.10%
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	3	3	0.8425	0.0823	0.8425	0.0893	0.0823	0.0594	9.77%	2.15	0.0183	4.10%
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	5	5	0.8922	0.2322	0.8922	0.0942	0.2322	0.1298	26.02%	5.74	0.3872	4.07%

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241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (%)	1		0.8190									
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	6	5	0.8680	0.0368	0.8680	0.0918	0.0368	0.0206	4.24%	0.93	0.0076	4.09%
241.99	Acid Soluble Fe, Other (%)	4	4	0.8627	0.0930	0.8627	0.0913	0.0930	0.0581	10.78%	2.37	0.0729	4.09%
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	1		46.50									
251.30	Acid Soluble Pb, ICP (ppm)	9	9	9.377	2.575	9.347		2.853	1.189	30.52%		0.3153	11.43%
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	1		11.75									
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	6	5	12.56	2.768	12.56		2.768	1.547	22.04%		0.6265	10.93%
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	2	1	22.85									
251.99	Acid Soluble Pb, Other (ppm)	4	4	8.776	3.488	8.776		3.488	2.180	39.75%		0.2775	11.54%
261.00	Acid Soluble Mn, AA, Mn2+ only (%)	1		0.3545									
261.12	Acid Soluble Mn, AA, inorganic 965.09 (%)	2	2	0.3875	0.0035								
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	4	4	0.3686	0.0190	0.3686	0.0419	0.0190	0.0119	5.15%	1.06	0.0193	4.65%
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (%)	1		0.5050									
261.34	Acid Soluble Mn, ICP, test portion 2006.03A-C (%)	1		0.3965									
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	6	6	0.3807	0.0358	0.3807	0.0431	0.0406	0.0207	10.67%	2.20	0.0122	4.63%
261.99	Acid Soluble Mn, Other (%)	4	4	0.4150	0.0323	0.4150	0.0465	0.0323	0.0202	7.78%	1.62	0.0558	4.57%
281.00	Acid Soluble Hg, AA (ppm)	1		0.5000									
281.30	Acid Soluble Hg, ICP (ppm)	4	1	0.5000		0.4150		0.0323	0.0404	7.78%		0.0000	18.26%
281.99	Acid Soluble Hg, Other (ppm)	5	5	0.1008	0.0304	0.1008		0.0304	0.0170	30.20%		0.0119	22.60%
289.30	Acid Soluble Mo, ICP (ppm)	3	3	10.97	10.92	10.97	4.2901	10.92	7.883	99.60%	5.93	0.3469	11.16%
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	8	8	6.208	1.654	6.208	2.8623	1.876	0.8289	30.21%	1.53	1.167	12.15%
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	2	2	7.065	1.891								
289.99	Acid Soluble Mo, Other (ppm)	2	1	7.855									
291.00	Acid Soluble Ni, AA, test portion 2006.03 modified w/dual acid (ppm)	1		25.63									
291.30	Acid Soluble Ni, ICP (ppm)	7	7	39.62	17.16	35.82		9.406	4.444	26.26%		2.664	9.34%
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	6	6	44.92	3.829	44.92		4.342	2.216	9.67%		1.926	9.02%
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	2	2	45.93	0.1066								
291.99	Acid Soluble Ni, Other (ppm)	4	4	40.99	5.007	40.99		5.007	3.129	12.21%		2.510	9.15%
301.00	Acid Soluble Se, AA, test portion 2006.03 modified w/dual acid (ppm)	1		0.7850									
301.30	Acid Soluble Se, ICP (ppm)	1		2.021									
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	1		0.4500									
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	4	1	2.770		40.99		5.007	6.258	12.21%		0.0270	9.15%
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	2	0	8.201									
301.99	Acid Soluble Se, Other (ppm)	4	3	2.082	2.320	2.082		2.320	1.674	111.45%		0.6553	14.33%
311.00	Sodium, AA (%)	1		0.2100									
311.32	Sodium, ICP, 2006.03 test portion (%)	1		0.1918									
311.33	Sodium, ICP, test portion as in 2017.02 (%)	4	4	0.2090	0.0220	0.2090	0.0259	0.0220	0.0137	10.50%	1.97	0.0087	5.06%
311.99	Sodium, Other (%)	1		0.2250									
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	4	4	0.6866	0.0550	0.6866	0.0737	0.0550	0.0344	8.01%	1.74	0.0273	4.23%
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	9	8	0.6549	0.0531	0.6537	0.0704	0.0574	0.0254	8.79%	1.90	0.0204	4.26%
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	3	3	0.7192	0.1333	0.7192	0.0769	0.1333	0.0962	18.53%	4.04	0.0345	4.20%
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	10	9	0.6587	0.0284	0.6587	0.0709	0.0322	0.0134	4.89%	1.06	0.0200	4.26%
321.99	Acid Soluble Zn, Other (%)	7	6	0.6570	0.0983	0.6570	0.0707	0.1114	0.0569	16.96%	3.67	0.0074	4.26%

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

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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.

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STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 201211

Method Precision Report

Magnesium 36

Issue Date : 01/31/2021

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility sR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
010.60	Total N, Combustion (1%)	57	50	2.298	0.1190	0.1156	0.0403	0.1224	5.03%	1.76%	5.33%	3.036
010.99	Total N, Other (1%)	15	15	2.028	0.4460	0.4436	0.0647	0.4483	21.87%	3.19%	22.10%	6.932
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	10	9	36.23	1.134	1.098	0.3981	1.168	3.03%	1.10%	3.22%	2.934
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	22	18	35.89	2.238	2.177	0.7374	2.298	6.07%	2.05%	6.40%	3.117
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	16	14	35.88	2.373	2.314	0.7484	2.432	6.45%	2.09%	6.78%	3.249
121.99	Acid Soluble Mg, Other (36%)	15	15	37.15	3.247	3.216	0.6360	3.278	8.66%	1.71%	8.82%	5.154
148.01	Total S, Gravimetric - sulfate and elemental (6%)	10	10	4.831	0.1373	0.1280	0.0704	0.1460	2.65%	1.46%	3.02%	2.075
148.07	Total S, ICP, test portion as in 2017.02 (6%)	16	14	4.925	0.4741	0.4724	0.0571	0.4758	9.59%	1.16%	9.66%	8.329
148.99	Total S, Other (6%)	17	16	5.071	0.4873	0.4846	0.0729	0.4900	9.56%	1.44%	9.66%	6.718
181.30	Acid Soluble Cd, ICP (ppm)	9	9	0.9770	0.2143	0.2129	0.0345	0.2157	21.79%	3.53%	22.08%	6.251
251.30	Acid Soluble Pb, ICP (ppm)	9	9	9.377	2.575	2.567	0.2876	2.583	27.37%	3.07%	27.54%	8.981
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	10	8	0.6619	0.0285	0.0268	0.0137	0.0301	4.05%	2.08%	4.55%	2.192

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)

Sample # 201211

Magnesium 36

Lab Values

Methods: 120

Labs Reporting: 92

Issue Date : 01/31/2021

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 N, Other (%)	0524	0.3709	0.0163	0.4458	0.0688	0.0071	3	-1.09		0
001.99	Ammoniacal N, Other (%)	0506	0.4605	0.0010	0.4458	0.0688	0.0071	3	0.21		0
001.99	Ammoniacal N, Other (%)	0553	0.5060	0.0040	0.4458	0.0688	0.0071	3	0.88		0
002.99	Nitrate N, Other (%)	0553	0.0265	0.0010				1			0
005.99	Urea N, Other (%)	0524	0.3970	0.0020				2			0
005.99	Urea N, Other (%)	0506	1.885	0.0100				2			0
010.11	Total N, Modified Comprehensive (1%)	0551	1.175	0.0500	1.632	0.4600	0.0650	5	-0.87		0
010.11	Total N, Modified Comprehensive (1%)	0522	1.220	0.0800	1.632	0.4600	0.0650	5	-0.78		0
010.11	Total N, Modified Comprehensive (1%)	0456	1.550	0.1000	1.632	0.4600	0.0650	5	-0.15		0
010.11	Total N, Modified Comprehensive (1%)	0510	2.033	0.0550	1.632	0.4600	0.0650	5	0.76		0
010.11	Total N, Modified Comprehensive (1%)	0546	2.180	0.0400	1.632	0.4600	0.0650	5	1.04		0
010.11	Total N, Modified Comprehensive (1%)	0309	1.775	0.6900	1.632	0.4600	0.0650	5	0.27		1
010.12	Total N, Salicylic (1%)	0568	0.0073	0.0042				2			0
010.12	Total N, Salicylic (1%)	0481	2.235	0.0700				2			0
010.60	Total N, Combustion (1%)	0420	1.490	0.0400	2.299	0.0790	0.0563	54	-10.24	Low	0
010.60	Total N, Combustion (1%)	0234	1.899	0.0219	2.299	0.0790	0.0563	54	-5.06	OK	0
010.60	Total N, Combustion (1%)	0185	1.900	0.0200	2.299	0.0790	0.0563	54	-5.05	OK	0
010.60	Total N, Combustion (1%)	0072	2.125	0.3900	2.299	0.0790	0.0563	54	-2.20	OK	0
010.60	Total N, Combustion (1%)	0049	2.168	0.0210	2.299	0.0790	0.0563	54	-1.66	OK	0
010.60	Total N, Combustion (1%)	0452	2.200	0.0000	2.299	0.0790	0.0563	54	-1.25	OK	0
010.60	Total N, Combustion (1%)	0451	2.227	0.0020	2.299	0.0790	0.0563	54	-0.91	OK	0
010.60	Total N, Combustion (1%)	0472	2.230	0.0000	2.299	0.0790	0.0563	54	-0.87	OK	0
010.60	Total N, Combustion (1%)	0521	2.232	0.0000	2.299	0.0790	0.0563	54	-0.85	OK	0
010.60	Total N, Combustion (1%)	0377	2.235	0.0500	2.299	0.0790	0.0563	54	-0.81	OK	0
010.60	Total N, Combustion (1%)	0220	2.235	0.0700	2.299	0.0790	0.0563	54	-0.81	OK	0
010.60	Total N, Combustion (1%)	0106	2.240	0.0200	2.299	0.0790	0.0563	54	-0.75	OK	0
010.60	Total N, Combustion (1%)	0390	2.240	0.1000	2.299	0.0790	0.0563	54	-0.75	OK	0
010.60	Total N, Combustion (1%)	0423	2.246	0.0480	2.299	0.0790	0.0563	54	-0.67	OK	0
010.60	Total N, Combustion (1%)	0389	2.250	0.0400	2.299	0.0790	0.0563	54	-0.62	OK	0
010.60	Total N, Combustion (1%)	0450	2.250	0.1000	2.299	0.0790	0.0563	54	-0.62	OK	0
010.60	Total N, Combustion (1%)	0043	2.265	0.0100	2.299	0.0790	0.0563	54	-0.43	OK	0
010.60	Total N, Combustion (1%)	0516	2.265	0.1100	2.299	0.0790	0.0563	54	-0.43	OK	0
010.60	Total N, Combustion (1%)	0527	2.277	0.0090	2.299	0.0790	0.0563	54	-0.28	OK	0
010.60	Total N, Combustion (1%)	0231	2.280	0.0000	2.299	0.0790	0.0563	54	-0.24	OK	0
010.60	Total N, Combustion (1%)	0035	2.280	0.0600	2.299	0.0790	0.0563	54	-0.24	OK	0
010.60	Total N, Combustion (1%)	0086	2.284	0.0877	2.299	0.0790	0.0563	54	-0.19	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total N, Combustion (1%)	0136	2.285	0.1100	2.299	0.0790	0.0563	54	-0.18	OK	0
010.60	Total N, Combustion (1%)	0486	2.285	0.0100	2.299	0.0790	0.0563	54	-0.18	OK	0
010.60	Total N, Combustion (1%)	0360	2.290	0.0200	2.299	0.0790	0.0563	54	-0.11	OK	0
010.60	Total N, Combustion (1%)	0481	2.290	0.0200	2.299	0.0790	0.0563	54	-0.11	OK	0
010.60	Total N, Combustion (1%)	0055	2.295	0.0900	2.299	0.0790	0.0563	54	-0.05	OK	0
010.60	Total N, Combustion (1%)	0095	2.295	0.0500	2.299	0.0790	0.0563	54	-0.05	OK	0
010.60	Total N, Combustion (1%)	0354	2.295	0.0100	2.299	0.0790	0.0563	54	-0.05	OK	0
010.60	Total N, Combustion (1%)	0177	2.297	0.0290	2.299	0.0790	0.0563	54	-0.03	OK	0
010.60	Total N, Combustion (1%)	0523	2.300	0.0000	2.299	0.0790	0.0563	54	0.01	OK	0
010.60	Total N, Combustion (1%)	0421	2.309	0.0230	2.299	0.0790	0.0563	54	0.12	OK	0
010.60	Total N, Combustion (1%)	0037	2.310	0.0600	2.299	0.0790	0.0563	54	0.14	OK	0
010.60	Total N, Combustion (1%)	0547	2.310	0.0400	2.299	0.0790	0.0563	54	0.14	OK	0
010.60	Total N, Combustion (1%)	0561	2.310	0.0000	2.299	0.0790	0.0563	54	0.14	OK	0
010.60	Total N, Combustion (1%)	0405	2.320	0.0400	2.299	0.0790	0.0563	54	0.27	OK	0
010.60	Total N, Combustion (1%)	0157	2.330	0.0000	2.299	0.0790	0.0563	54	0.39	OK	0
010.60	Total N, Combustion (1%)	0292	2.330	0.0000	2.299	0.0790	0.0563	54	0.39	OK	0
010.60	Total N, Combustion (1%)	0324	2.330	0.0200	2.299	0.0790	0.0563	54	0.39	OK	0
010.60	Total N, Combustion (1%)	0073	2.335	0.0300	2.299	0.0790	0.0563	54	0.46	OK	0
010.60	Total N, Combustion (1%)	0230	2.350	0.0000	2.299	0.0790	0.0563	54	0.65	OK	0
010.60	Total N, Combustion (1%)	0325	2.355	0.0500	2.299	0.0790	0.0563	54	0.71	OK	0
010.60	Total N, Combustion (1%)	0371	2.360	0.0600	2.299	0.0790	0.0563	54	0.77	OK	0
010.60	Total N, Combustion (1%)	0029	2.369	0.0940	2.299	0.0790	0.0563	54	0.89	OK	0
010.60	Total N, Combustion (1%)	0114	2.370	0.0200	2.299	0.0790	0.0563	54	0.90	OK	0
010.60	Total N, Combustion (1%)	0550	2.380	0.3800	2.299	0.0790	0.0563	54	1.03	OK	0
010.60	Total N, Combustion (1%)	0023	2.400	0.0000	2.299	0.0790	0.0563	54	1.28	OK	0
010.60	Total N, Combustion (1%)	0040	2.400	0.0000	2.299	0.0790	0.0563	54	1.28	OK	0
010.60	Total N, Combustion (1%)	0494	2.425	0.2100	2.299	0.0790	0.0563	54	1.60	OK	0
010.60	Total N, Combustion (1%)	0291	2.455	0.0100	2.299	0.0790	0.0563	54	1.98	OK	0
010.60	Total N, Combustion (1%)	0368	2.508	0.0180	2.299	0.0790	0.0563	54	2.65	OK	0
010.60	Total N, Combustion (1%)	0027	2.525	0.1100	2.299	0.0790	0.0563	54	2.86	OK	0
010.60	Total N, Combustion (1%)	0402	2.655	0.0300	2.299	0.0790	0.0563	54	4.51	OK	0
010.60	Total N, Combustion (1%)	0255	2.784	0.3040	2.299	0.0790	0.0563	54	6.14	OK	0
010.60	Total N, Combustion (1%)	0042	1.940	0.4600	2.299	0.0790	0.0563	54	-4.54	OK	1
010.60	Total N, Combustion (1%)	0444	2.460	0.5600	2.299	0.0790	0.0563	54	2.04	OK	1
010.60	Total N, Combustion (1%)	0041	3.745	0.0240	2.299	0.0790	0.0563	54	18.30	High	2
010.99	Total N, Other (1%)	0551	1.175	0.0500	2.047	0.4644	0.0701	15	-1.88	Low	0
010.99	Total N, Other (1%)	0537	1.240	0.2200	2.047	0.4644	0.0701	15	-1.74	Low	0
010.99	Total N, Other (1%)	0556	1.400	0.0200	2.047	0.4644	0.0701	15	-1.39	Low	0
010.99	Total N, Other (1%)	0476	1.687	0.1817	2.047	0.4644	0.0701	15	-0.78	OK	0
010.99	Total N, Other (1%)	0394	1.897	0.0100	2.047	0.4644	0.0701	15	-0.32	OK	0
010.99	Total N, Other (1%)	0558	2.045	0.0300	2.047	0.4644	0.0701	15	0.00	OK	0
010.99	Total N, Other (1%)	0539	2.160	0.0600	2.047	0.4644	0.0701	15	0.24	OK	0
010.99	Total N, Other (1%)	0524	2.199	0.0797	2.047	0.4644	0.0701	15	0.33	OK	0
010.99	Total N, Other (1%)	0493	2.300	0.1000	2.047	0.4644	0.0701	15	0.54	OK	0
010.99	Total N, Other (1%)	0562	2.300	0.1000	2.047	0.4644	0.0701	15	0.54	OK	0
010.99	Total N, Other (1%)	0506	2.345	0.0100	2.047	0.4644	0.0701	15	0.64	OK	0
010.99	Total N, Other (1%)	0559	2.390	0.0200	2.047	0.4644	0.0701	15	0.74	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
010.99	Total N, Other (1%)	0560	2.415	0.0500	2.047	0.4644	0.0701	15	0.79	OK	0
010.99	Total N, Other (1%)	0564	2.420	0.0600	2.047	0.4644	0.0701	15	0.80	OK	0
010.99	Total N, Other (1%)	0565	2.450	0.0600	2.047	0.4644	0.0701	15	0.87	OK	0
020.50	Total P2O5, ICP (%)	0524	1.084	0.0016	1.355	0.2235	0.0221	7	-1.10	NA	0
020.50	Total P2O5, ICP (%)	0389	1.220	0.0600	1.355	0.2235	0.0221	7	-0.55	NA	0
020.50	Total P2O5, ICP (%)	0472	1.275	0.0100	1.355	0.2235	0.0221	7	-0.32	NA	0
020.50	Total P2O5, ICP (%)	0423	1.285	0.0040	1.355	0.2235	0.0221	7	-0.28	NA	0
020.50	Total P2O5, ICP (%)	0368	1.409	0.0181	1.355	0.2235	0.0221	7	0.22	NA	0
020.50	Total P2O5, ICP (%)	0523	1.575	0.0500	1.355	0.2235	0.0221	7	0.89	NA	0
020.50	Total P2O5, ICP (%)	0527	1.636	0.0110	1.355	0.2235	0.0221	7	1.14	NA	0
020.50	Total P2O5, ICP (%)	0552	0.0000	0.0000	1.355	0.2235	0.0221	7			4
020.99	Total P2O5, Other (%)	0515	1.610	0.3912				1			0
041.20	Direct Available P2O5, Spectrophotometric (%)	0553	1.327	0.0040				1			0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (%)	0568	0.0350	0.0100	0.8250	0.6853	0.0367	3	-1.15		0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (%)	0354	1.180	0.0400	0.8250	0.6853	0.0367	3	0.52		0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (%)	0472	1.260	0.0600	0.8250	0.6853	0.0367	3	0.63		0
041.50	Direct Available P2O5, ICP (%)	0421	1.342	0.0191				2			0
041.50	Direct Available P2O5, ICP (%)	0325	1.580	0.0200				2			0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (%)	0423	1.302	0.0170				1			0
050.31	Soluble K2O, AA (Citrate) (%)	0472	0.1000	0.0000				1			0
050.51	Soluble K2O, ICP (Citrate) (%)	0568	0.1350	0.0100				2			0
050.51	Soluble K2O, ICP (Citrate) (%)	0368	0.4766	0.0239				2			0
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	0354	0.3870	0.0520				2			0
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	0423	0.4780	0.0580				2			0
050.99	Soluble K2O, Other (%)	0325	0.3500	0.0400	0.4452	0.0826	0.0131	7	-1.04	OK	0
050.99	Soluble K2O, Other (%)	0421	0.3999	0.0295	0.4452	0.0826	0.0131	7	-0.50	OK	0
050.99	Soluble K2O, Other (%)	0524	0.4120	0.0011	0.4452	0.0826	0.0131	7	-0.36	OK	0
050.99	Soluble K2O, Other (%)	0521	0.4362	0.0000	0.4452	0.0826	0.0131	7	-0.10	OK	0
050.99	Soluble K2O, Other (%)	0389	0.4400	0.0000	0.4452	0.0826	0.0131	7	-0.06	OK	0
050.99	Soluble K2O, Other (%)	0527	0.5096	0.0089	0.4452	0.0826	0.0131	7	0.70	OK	0
050.99	Soluble K2O, Other (%)	0553	0.6750	0.0120	0.4452	0.0826	0.0131	7	2.51	OK	0
050.99	Soluble K2O, Other (%)	0523	0.7500	0.1000	0.4452	0.0826	0.0131	7	3.34	OK	1
050.99	Soluble K2O, Other (%)	0552	0.0000	0.0000	0.4452	0.0826	0.0131	7			4
060.00	Water (Free), Vacuum Oven (%)	0456	1.465	0.0300				1			0
060.99	Water (Free), Other (%)	0510	1.747	0.0076				1			0
101.00	Acid Soluble Ca, AA, inorganic 965.09 (%)	0553	0.8800	0.0200				1			0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0035	0.7885	0.1170	3.829	6.253	0.0654	5	-0.49		0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0472	0.8700	0.0200	3.829	6.253	0.0654	5	-0.47		0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0354	0.9200	0.0000	3.829	6.253	0.0654	5	-0.47		0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0402	1.565	0.1900	3.829	6.253	0.0654	5	-0.36		0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0568	15.00	0.0000	3.829	6.253	0.0654	5	1.79		0
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	0423	0.8785	0.0150				1			0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0106	0.7005	0.0419	0.8624	0.0522	0.0340	6	-2.76	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0368	0.8488	0.0033	0.8624	0.0522	0.0340	6	-0.23	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0421	0.8623	0.0217	0.8624	0.0522	0.0340	6	0.00	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0494	0.8674	0.0480	0.8624	0.0522	0.0340	6	0.09	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0025	0.8710	0.0740	0.8624	0.0522	0.0340	6	0.15	OK	0

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101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0527	1.023	0.0149	0.8624	0.0522	0.0340	6	2.73	OK	0
101.99	Acid Soluble Ca, Other (%)	0389	0.7650	0.0100				2			0
101.99	Acid Soluble Ca, Other (%)	0552	1.355	0.3700				2			0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	0157	35.05	0.3000	36.24	0.9783	0.4850	10	-1.13	Low	0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	0040	35.44	0.6700	36.24	0.9783	0.4850	10	-0.77	OK	0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	0536	35.88	0.1500	36.24	0.9783	0.4850	10	-0.35	OK	0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	0539	36.01	0.0800	36.24	0.9783	0.4850	10	-0.22	OK	0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	0535	36.05	0.1000	36.24	0.9783	0.4850	10	-0.18	OK	0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	0551	36.06	0.1100	36.24	0.9783	0.4850	10	-0.18	OK	0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	0531	36.08	0.0500	36.24	0.9783	0.4850	10	-0.16	OK	0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	0029	36.44	1.500	36.24	0.9783	0.4850	10	0.19	OK	0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	0553	39.05	0.1000	36.24	0.9783	0.4850	10	2.67	High	0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (36%)	0550	60.77	1.790	36.24	0.9783	0.4850	10	23.31	High	0
121.03	Acid Soluble Mg, AA, 965.09, test portion 2006.03A-C w/dual acid (36%)	0546	37.43	0.1003				1			0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0402	30.62	0.5600	36.42	2.627	0.8928	20	-2.21	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0451	33.42	0.3900	36.42	2.627	0.8928	20	-1.14	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0073	34.07	0.7100	36.42	2.627	0.8928	20	-0.90	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0377	34.40	0.6500	36.42	2.627	0.8928	20	-0.77	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0035	34.80	2.800	36.42	2.627	0.8928	20	-0.62	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0157	35.00	0.8000	36.42	2.627	0.8928	20	-0.54	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0231	35.01	0.5500	36.42	2.627	0.8928	20	-0.54	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0390	35.10	1.000	36.42	2.627	0.8928	20	-0.50	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0371	35.38	0.6800	36.42	2.627	0.8928	20	-0.40	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0420	35.98	0.8200	36.42	2.627	0.8928	20	-0.17	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0444	36.05	0.0200	36.42	2.627	0.8928	20	-0.14	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0360	36.42	0.0300	36.42	2.627	0.8928	20	0.00	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0255	36.97	0.4760	36.42	2.627	0.8928	20	0.21	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0433	37.09	1.090	36.42	2.627	0.8928	20	0.25	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0354	38.25	0.1000	36.42	2.627	0.8928	20	0.70	High	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0291	38.32	0.2200	36.42	2.627	0.8928	20	0.72	High	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0324	38.90	2.400	36.42	2.627	0.8928	20	0.94	High	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0325	40.20	4.000	36.42	2.627	0.8928	20	1.44	High	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0452	40.21	0.1700	36.42	2.627	0.8928	20	1.44	High	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0472	43.76	0.3900	36.42	2.627	0.8928	20	2.79	High	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0234	38.17	5.358	36.42	2.627	0.8928	20	0.67	High	1
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (36%)	0568	0.3650	0.0100	36.42	2.627	0.8928	20	-13.72	Low	2
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (36%)	0095	31.82	0.3600	35.49	2.440	0.4782	5	-1.50		0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (36%)	0292	35.07	0.0700	35.49	2.440	0.4782	5	-0.17		0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (36%)	0220	35.62	0.6500	35.49	2.440	0.4782	5	0.05		0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (36%)	0423	36.40	0.6000	35.49	2.440	0.4782	5	0.37		0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (36%)	0394	38.54	0.7110	35.49	2.440	0.4782	5	1.25		0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0106	30.52	3.305	36.12	1.716	0.8431	15	-3.26	Low	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0055	33.12	0.9600	36.12	1.716	0.8431	15	-1.75	Low	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0117	34.67	1.000	36.12	1.716	0.8431	15	-0.84	Low	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0177	35.59	0.0677	36.12	1.716	0.8431	15	-0.31	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0037	35.65	0.0330	36.12	1.716	0.8431	15	-0.27	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0368	35.97	0.0472	36.12	1.716	0.8431	15	-0.08	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0043	36.00	1.520	36.12	1.716	0.8431	15	-0.07	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0486	36.07	0.5700	36.12	1.716	0.8431	15	-0.03	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0561	36.21	0.1300	36.12	1.716	0.8431	15	0.05	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0169	36.26	0.2100	36.12	1.716	0.8431	15	0.08	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0494	36.49	0.1712	36.12	1.716	0.8431	15	0.22	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0136	36.55	0.1000	36.12	1.716	0.8431	15	0.25	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0421	37.86	0.2284	36.12	1.716	0.8431	15	1.01	High	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0025	38.95	4.100	36.12	1.716	0.8431	15	1.65	High	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0527	41.38	0.2047	36.12	1.716	0.8431	15	3.07	High	0
121.33	Acid Soluble Mg, ICP, 2017.02 (36%)	0515	41.24	6.317	36.12	1.716	0.8431	15	2.98	High	1
121.70	Acid Soluble Mg, Titrimetric (EDTA) (36%)	0518	35.99	0.2600	36.84	0.5603	0.2200	5	-1.52		0
121.70	Acid Soluble Mg, Titrimetric (EDTA) (36%)	0200	36.55	0.6100	36.84	0.5603	0.2200	5	-0.53		0
121.70	Acid Soluble Mg, Titrimetric (EDTA) (36%)	0564	37.18	0.0500	36.84	0.5603	0.2200	5	0.60		0
121.70	Acid Soluble Mg, Titrimetric (EDTA) (36%)	0565	37.19	0.0800	36.84	0.5603	0.2200	5	0.62		0
121.70	Acid Soluble Mg, Titrimetric (EDTA) (36%)	0493	37.30	0.1000	36.84	0.5603	0.2200	5	0.82		0
121.99	Acid Soluble Mg, Other (36%)	0523	31.15	2.100	36.75	1.890	0.6877	15	-2.97	Low	0
121.99	Acid Soluble Mg, Other (36%)	0506	34.58	0.1200	36.75	1.890	0.6877	15	-1.15	Low	0
121.99	Acid Soluble Mg, Other (36%)	0524	35.61	1.306	36.75	1.890	0.6877	15	-0.60	Low	0
121.99	Acid Soluble Mg, Other (36%)	0516	35.65	0.9630	36.75	1.890	0.6877	15	-0.58	Low	0
121.99	Acid Soluble Mg, Other (36%)	0552	35.74	0.1500	36.75	1.890	0.6877	15	-0.54	Low	0
121.99	Acid Soluble Mg, Other (36%)	0389	35.87	0.6400	36.75	1.890	0.6877	15	-0.47	OK	0
121.99	Acid Soluble Mg, Other (36%)	0027	36.19	0.2750	36.75	1.890	0.6877	15	-0.30	OK	0
121.99	Acid Soluble Mg, Other (36%)	0558	36.40	1.200	36.75	1.890	0.6877	15	-0.19	OK	0
121.99	Acid Soluble Mg, Other (36%)	0560	37.05	0.3000	36.75	1.890	0.6877	15	0.16	OK	0
121.99	Acid Soluble Mg, Other (36%)	0481	37.30	0.2000	36.75	1.890	0.6877	15	0.29	OK	0
121.99	Acid Soluble Mg, Other (36%)	0422	37.56	0.0900	36.75	1.890	0.6877	15	0.42	OK	0
121.99	Acid Soluble Mg, Other (36%)	0547	37.70	0.4000	36.75	1.890	0.6877	15	0.50	OK	0
121.99	Acid Soluble Mg, Other (36%)	0042	38.58	0.2200	36.75	1.890	0.6877	15	0.97	High	0
121.99	Acid Soluble Mg, Other (36%)	0515	43.69	1.082	36.75	1.890	0.6877	15	3.67	High	0
121.99	Acid Soluble Mg, Other (36%)	0450	44.22	1.270	36.75	1.890	0.6877	15	3.95	High	0
131.00	Water Soluble Mg, AA (%)	0309	49.03	1.290				1			0
131.70	Water Soluble Mg, Titrimetric (EDTA) (%)	0510	36.06	0.0218				1			0
131.99	Water Soluble Mg, Other (%)	0559	36.99	0.0200				1			0
143.99	Elemental S, Other (%)	0472	4.455	0.0100	4.802	0.3488	0.1628	7	-0.90	NA	0
143.99	Elemental S, Other (%)	0255	4.521	0.0860	4.802	0.3488	0.1628	7	-0.73	NA	0
143.99	Elemental S, Other (%)	0390	4.595	0.4700	4.802	0.3488	0.1628	7	-0.54	NA	0
143.99	Elemental S, Other (%)	0368	4.755	0.1535	4.802	0.3488	0.1628	7	-0.12	NA	0
143.99	Elemental S, Other (%)	0291	4.975	0.0500	4.802	0.3488	0.1628	7	0.45	NA	0
143.99	Elemental S, Other (%)	0389	5.015	0.1700	4.802	0.3488	0.1628	7	0.55	NA	0
143.99	Elemental S, Other (%)	0325	5.300	0.2000	4.802	0.3488	0.1628	7	1.29	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0562	4.700	0.1000	4.879	0.2023	0.1125	6	-0.79	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0106	4.715	0.0900	4.879	0.2023	0.1125	6	-0.72	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0522	4.823	0.1150	4.879	0.2023	0.1125	6	-0.25	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0561	4.920	0.2400	4.879	0.2023	0.1125	6	0.18	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0550	4.935	0.0100	4.879	0.2023	0.1125	6	0.25	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0405	5.200	0.1200	4.879	0.2023	0.1125	6	1.41	NA	0
145.99	Sulfate S, HCl soluble, Other (%)	0444	4.445	0.0900	4.932	0.7251	0.1100	3	-0.67		0

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			Value	Range	Rob Mean	Rob SD	R-bar				
145.99	Sulfate S, HCl soluble, Other (%)	0200	4.585	0.0700	4.932	0.7251	0.1100	3	-0.48		0
145.99	Sulfate S, HCl soluble, Other (%)	0553	5.765	0.1700	4.932	0.7251	0.1100	3	1.15		0
146.00	Total S in Liquid, Gravimetric - sulfate, sulfite, thiosulfate, a... (6%)	0324	4.925	0.0300				1			0
148.00	Total S, Combustion (6%)	0420	4.660	0.0800	4.903	0.2234	0.0731	7	-0.98	OK	0
148.00	Total S, Combustion (6%)	0049	4.685	0.0680	4.903	0.2234	0.0731	7	-0.88	OK	0
148.00	Total S, Combustion (6%)	0451	4.749	0.1630	4.903	0.2234	0.0731	7	-0.63	OK	0
148.00	Total S, Combustion (6%)	0029	5.020	0.0010	4.903	0.2234	0.0731	7	0.47	OK	0
148.00	Total S, Combustion (6%)	0114	5.025	0.0700	4.903	0.2234	0.0731	7	0.49	OK	0
148.00	Total S, Combustion (6%)	0371	5.060	0.1200	4.903	0.2234	0.0731	7	0.63	OK	0
148.00	Total S, Combustion (6%)	0136	5.125	0.0100	4.903	0.2234	0.0731	7	0.90	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (6%)	0230	4.645	0.2100	4.829	0.1510	0.0819	10	-1.13	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (6%)	0564	4.700	0.0400	4.829	0.1510	0.0819	10	-0.79	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (6%)	0481	4.700	0.0200	4.829	0.1510	0.0819	10	-0.79	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (6%)	0565	4.710	0.0200	4.829	0.1510	0.0819	10	-0.73	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (6%)	0493	4.850	0.1000	4.829	0.1510	0.0819	10	0.13	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (6%)	0073	4.890	0.1200	4.829	0.1510	0.0819	10	0.38	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (6%)	0157	4.895	0.1100	4.829	0.1510	0.0819	10	0.41	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (6%)	0029	4.900	0.0400	4.829	0.1510	0.0819	10	0.44	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (6%)	0055	4.945	0.0500	4.829	0.1510	0.0819	10	0.71	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (6%)	0476	5.077	0.1092	4.829	0.1510	0.0819	10	1.53	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0421	4.442	0.0237	5.047	0.6283	0.0765	16	-0.96	Low	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0292	4.560	0.1200	5.047	0.6283	0.0765	16	-0.77	Low	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0402	4.590	0.1000	5.047	0.6283	0.0765	16	-0.73	Low	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0394	4.606	0.0146	5.047	0.6283	0.0765	16	-0.70	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0444	4.625	0.0500	5.047	0.6283	0.0765	16	-0.67	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0117	4.670	0.0198	5.047	0.6283	0.0765	16	-0.60	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0037	4.697	0.0550	5.047	0.6283	0.0765	16	-0.56	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0546	4.747	0.0624	5.047	0.6283	0.0765	16	-0.48	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0494	4.760	0.0842	5.047	0.6283	0.0765	16	-0.46	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0177	4.995	0.0149	5.047	0.6283	0.0765	16	-0.08	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0040	5.000	0.0000	5.047	0.6283	0.0765	16	-0.07	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0043	5.655	0.0500	5.047	0.6283	0.0765	16	0.97	High	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0486	5.775	0.2100	5.047	0.6283	0.0765	16	1.16	High	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0515	5.812	0.2818	5.047	0.6283	0.0765	16	1.22	High	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0169	5.825	0.0500	5.047	0.6283	0.0765	16	1.24	High	0
148.07	Total S, ICP, test portion as in 2017.02 (6%)	0527	6.561	0.0876	5.047	0.6283	0.0765	16	2.41	High	0
148.99	Total S, Other (6%)	0559	4.505	0.0100	5.064	0.5377	0.0828	16	-1.04	Low	0
148.99	Total S, Other (6%)	0450	4.510	0.1800	5.064	0.5377	0.0828	16	-1.03	Low	0
148.99	Total S, Other (6%)	0433	4.565	0.0500	5.064	0.5377	0.0828	16	-0.93	Low	0
148.99	Total S, Other (6%)	0547	4.740	0.0800	5.064	0.5377	0.0828	16	-0.60	OK	0
148.99	Total S, Other (6%)	0377	4.745	0.0100	5.064	0.5377	0.0828	16	-0.59	OK	0
148.99	Total S, Other (6%)	0560	4.780	0.0400	5.064	0.5377	0.0828	16	-0.53	OK	0
148.99	Total S, Other (6%)	0516	4.784	0.1880	5.064	0.5377	0.0828	16	-0.52	OK	0
148.99	Total S, Other (6%)	0072	4.858	0.1274	5.064	0.5377	0.0828	16	-0.38	OK	0
148.99	Total S, Other (6%)	0506	4.900	0.0200	5.064	0.5377	0.0828	16	-0.30	OK	0
148.99	Total S, Other (6%)	0354	5.035	0.0100	5.064	0.5377	0.0828	16	-0.05	OK	0
148.99	Total S, Other (6%)	0452	5.230	0.0400	5.064	0.5377	0.0828	16	0.31	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
148.99	Total S, Other (6%)	0558	5.435	0.0700	5.064	0.5377	0.0828	16	0.69	OK	0
148.99	Total S, Other (6%)	0220	5.470	0.1600	5.064	0.5377	0.0828	16	0.76	OK	0
148.99	Total S, Other (6%)	0562	5.725	0.1500	5.064	0.5377	0.0828	16	1.23	High	0
148.99	Total S, Other (6%)	0537	5.915	0.1300	5.064	0.5377	0.0828	16	1.58	High	0
148.99	Total S, Other (6%)	0539	5.940	0.0600	5.064	0.5377	0.0828	16	1.63	High	0
148.99	Total S, Other (6%)	0523	4.993	0.7050	5.064	0.5377	0.0828	16	-0.13	OK	1
149.04	S - HNO3 soluble, ICP (%)	0423	4.523	0.0850	4.891	0.3287	0.1121	3	-1.12		0
149.04	S - HNO3 soluble, ICP (%)	0231	4.995	0.0300	4.891	0.3287	0.1121	3	0.32		0
149.04	S - HNO3 soluble, ICP (%)	0524	5.155	0.2213	4.891	0.3287	0.1121	3	0.80		0
149.99	S - HNO3 soluble, Other (%)	0518	5.860	0.1200				1			0
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	1.545	0.3100				1			0
151.30	Acid Soluble As, ICP (ppm)	0255	1.993	0.0740	2.304	0.2534	0.0561	5	-1.23		0
151.30	Acid Soluble As, ICP (ppm)	0523	2.261	0.1680	2.304	0.2534	0.0561	5	-0.17		0
151.30	Acid Soluble As, ICP (ppm)	0524	2.267	0.0383	2.304	0.2534	0.0561	5	-0.15		0
151.30	Acid Soluble As, ICP (ppm)	0450	2.300	0.0000	2.304	0.2534	0.0561	5	-0.02		0
151.30	Acid Soluble As, ICP (ppm)	0415	2.700	0.0000	2.304	0.2534	0.0561	5	1.56		0
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	0220	2.050	0.7000				1			0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0136	2.180	0.0200	2.911	0.7068	0.1173	4	-0.88		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0037	2.590	0.0880	2.911	0.7068	0.1173	4	-0.39		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0494	3.045	0.3300	2.911	0.7068	0.1173	4	0.16		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0527	3.829	0.0311	2.911	0.7068	0.1173	4	1.10		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0515	1.753	3.506	2.911	0.7068	0.1173	4			4
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0117	< 10		2.911	0.7068	0.1173	4			5
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0515	2.935	2.590				1			0
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0368	< 0.4					1			5
151.99	Acid Soluble As, Other (ppm)	0481	1.815	0.0300	2.194	0.5758	0.0325	4	-0.66		0
151.99	Acid Soluble As, Other (ppm)	0506	1.910	0.0000	2.194	0.5758	0.0325	4	-0.49		0
151.99	Acid Soluble As, Other (ppm)	0405	2.000	0.0000	2.194	0.5758	0.0325	4	-0.34		0
151.99	Acid Soluble As, Other (ppm)	0220	3.050	0.1000	2.194	0.5758	0.0325	4	1.49		0
165.00	Acid Soluble B, Spectrophotometric (%)	0553	0.1550	0.0040				1			0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0106	0.1426	0.0268	0.1577	0.0113	0.0055	5	-1.34		0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0444	0.1500	0.0000	0.1577	0.0113	0.0055	5	-0.68		0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0354	0.1600	0.0000	0.1577	0.0113	0.0055	5	0.20		0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0546	0.1660	0.0006	0.1577	0.0113	0.0055	5	0.73		0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0389	0.1700	0.0000	0.1577	0.0113	0.0055	5	1.08		0
165.99	Acid Soluble B, Other (%)	0524	0.1249	0.0019	0.1619	0.0265	0.0083	8	-1.28	Low	0
165.99	Acid Soluble B, Other (%)	0423	0.1440	0.0020	0.1619	0.0265	0.0083	8	-0.62	OK	0
165.99	Acid Soluble B, Other (%)	0421	0.1457	0.0019	0.1619	0.0265	0.0083	8	-0.56	OK	0
165.99	Acid Soluble B, Other (%)	0494	0.1676	0.0049	0.1619	0.0265	0.0083	8	0.19	OK	0
165.99	Acid Soluble B, Other (%)	0527	0.1676	0.0035	0.1619	0.0265	0.0083	8	0.19	OK	0
165.99	Acid Soluble B, Other (%)	0368	0.1692	0.0063	0.1619	0.0265	0.0083	8	0.25	OK	0
165.99	Acid Soluble B, Other (%)	0472	0.1750	0.0100	0.1619	0.0265	0.0083	8	0.45	OK	0
165.99	Acid Soluble B, Other (%)	0515	0.2084	0.0360	0.1619	0.0265	0.0083	8	1.60	High	0
165.99	Acid Soluble B, Other (%)	0552	0.4050	0.2700	0.1619	0.0265	0.0083	8	8.38	High	1
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	3.880	0.1000				1			0
181.30	Acid Soluble Cd, ICP (ppm)	0444	0.6700	0.0600	0.9770	0.2431	0.0323	9	-1.17	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0524	0.6713	0.0031	0.9770	0.2431	0.0323	9	-1.16	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				
181.30	Acid Soluble Cd, ICP (ppm)	0255	0.8560	0.0100	0.9770	0.2431	0.0323	9	-0.46	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0389	0.9200	0.0400	0.9770	0.2431	0.0323	9	-0.22	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0394	1.052	0.0770	0.9770	0.2431	0.0323	9	0.28	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0415	1.100	0.0000	0.9770	0.2431	0.0323	9	0.47	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0450	1.100	0.0000	0.9770	0.2431	0.0323	9	0.47	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0523	1.125	0.1010	0.9770	0.2431	0.0323	9	0.56	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0035	1.300	0.0000	0.9770	0.2431	0.0323	9	1.23	NA	0
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	0220	0.7000	0.0000				1			0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0136	1.090	0.0200	1.415	0.3467	0.1689	3	-0.94		0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0527	1.375	0.0066	1.415	0.3467	0.1689	3	-0.12		0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0494	1.780	0.4800	1.415	0.3467	0.1689	3	1.05		0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0515	1.126	2.252	1.415	0.3467	0.1689	3			4
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0117	< 5		1.415	0.3467	0.1689	3			5
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	0368	1.293	0.0379				2			0
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	0515	12.25	0.4670				2			0
181.99	Acid Soluble Cd, Other (ppm)	0481	0.6450	0.0100	0.8433	0.2580	0.0467	3	-0.77		0
181.99	Acid Soluble Cd, Other (ppm)	0220	0.7500	0.1000	0.8433	0.2580	0.0467	3	-0.36		0
181.99	Acid Soluble Cd, Other (ppm)	0405	1.135	0.0300	0.8433	0.2580	0.0467	3	1.13		0
190.00	Water Soluble Cl, Titrimetric (%)	0553	0.6250	0.0300				1			0
191.00	Acid Soluble Cr, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	21.73	0.1500				1			0
191.30	Acid Soluble Cr, ICP (ppm)	0389	39.35	2.170	55.12	15.45	4.351	8	-0.93	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0444	43.92	3.910	55.12	15.45	4.351	8	-0.66	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0035	45.85	11.70	55.12	15.45	4.351	8	-0.55	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0524	48.38	1.588	55.12	15.45	4.351	8	-0.40	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0394	53.25	3.900	55.12	15.45	4.351	8	-0.11	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0415	62.90	0.0000	55.12	15.45	4.351	8	0.46	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0523	69.00	11.54	55.12	15.45	4.351	8	0.82	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0450	152.0	0.0000	55.12	15.45	4.351	8	5.74	NA	0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0136	43.86	2.420	63.79	12.52	4.775	5	-1.59		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0527	59.76	1.260	63.79	12.52	4.775	5	-0.32		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0494	69.00	3.400	63.79	12.52	4.775	5	0.42		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0515	70.97	15.59	63.79	12.52	4.775	5	0.57		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0037	75.38	1.204	63.79	12.52	4.775	5	0.93		0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0368	58.87	2.420				2			0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0515	65.21	5.263				2			0
191.99	Acid Soluble Cr, Other (ppm)	0481	60.25	2.500	62.48	2.133	4.100	3	-1.05		0
191.99	Acid Soluble Cr, Other (ppm)	0506	62.70	0.8000	62.48	2.133	4.100	3	0.10		0
191.99	Acid Soluble Cr, Other (ppm)	0405	64.50	9.000	62.48	2.133	4.100	3	0.95		0
202.30	Acid Soluble Co, ICP (ppm)	0389	6.070	0.2800	12.08	5.520	1.190	4	-1.09		0
202.30	Acid Soluble Co, ICP (ppm)	0035	10.74	1.520	12.08	5.520	1.190	4	-0.24		0
202.30	Acid Soluble Co, ICP (ppm)	0524	12.11	0.1096	12.08	5.520	1.190	4	0.01		0
202.30	Acid Soluble Co, ICP (ppm)	0523	19.40	2.850	12.08	5.520	1.190	4	1.33		0
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0220	14.00	2.000				2			0
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0423	15.70	0.5100				2			0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0136	8.295	0.2700	17.33	4.872	1.068	6	-1.65	Low	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0527	15.93	0.2797	17.33	4.872	1.068	6	-0.26	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0494	17.85	0.3000	17.33	4.872	1.068	6	0.09	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				
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0037	18.49	0.9320	17.33	4.872	1.068	6	0.21	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0515	18.56	3.410	17.33	4.872	1.068	6	0.22	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0546	23.15	1.215	17.33	4.872	1.068	6	1.06	OK	0
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0368	9.950	1.645				2			0
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0515	24.21	1.147				2			0
202.99	Acid Soluble Co, Other (ppm)	0506	9.915	0.3700	16.14	4.060	1.205	5	-1.53		0
202.99	Acid Soluble Co, Other (ppm)	0255	14.31	1.257	16.14	4.060	1.205	5	-0.45		0
202.99	Acid Soluble Co, Other (ppm)	0405	18.15	0.1000	16.14	4.060	1.205	5	0.49		0
202.99	Acid Soluble Co, Other (ppm)	0481	18.35	0.3000	16.14	4.060	1.205	5	0.54		0
202.99	Acid Soluble Co, Other (ppm)	0220	20.00	4.000	16.14	4.060	1.205	5	0.95		0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	0553	0.0610	0.0000				2			0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	0550	0.0625	0.0005				2			0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0433	0.0540	0.0040	0.0702	0.0266	0.0145	7	-0.55	Low	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0035	0.0555	0.0070	0.0702	0.0266	0.0145	7	-0.50	Low	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0444	0.0560	0.0000	0.0702	0.0266	0.0145	7	-0.48	Low	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0234	0.0576	0.0005	0.0702	0.0266	0.0145	7	-0.43	Low	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0472	0.0600	0.0000	0.0702	0.0266	0.0145	7	-0.35	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0402	0.0980	0.0000	0.0702	0.0266	0.0145	7	0.94	High	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0552	0.1650	0.0900	0.0702	0.0266	0.0145	7	3.22	High	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0354	0.5350	0.9500	0.0702	0.0266	0.0145	7	15.78	High	1
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0255	0.0000	0.0000	0.0702	0.0266	0.0145	7			4
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	0394	0.0549	0.0005	0.0599	0.0042	0.0046	4	-1.19		0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	0423	0.0580	0.0020	0.0599	0.0042	0.0046	4	-0.44		0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	0095	0.0625	0.0102	0.0599	0.0042	0.0046	4	0.63		0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	0220	0.0641	0.0057	0.0599	0.0042	0.0046	4	1.00		0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0043	0.0500	0.0000	0.0597	0.0039	0.0011	7	-2.27	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0136	0.0580	0.0000	0.0597	0.0039	0.0011	7	-0.39	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0546	0.0593	0.0005	0.0597	0.0039	0.0011	7	-0.10	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0106	0.0595	0.0037	0.0597	0.0039	0.0011	7	-0.05	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0494	0.0600	0.0022	0.0597	0.0039	0.0011	7	0.07	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0527	0.0626	0.0005	0.0597	0.0039	0.0011	7	0.67	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0368	0.0647	0.0011	0.0597	0.0039	0.0011	7	1.16	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0515	0.0603	0.0115	0.0597	0.0039	0.0011	7	0.13	OK	1
221.99	Acid Soluble Cu, Other (%)	0524	0.0528	0.0003	0.0604	0.0068	0.0056	6	-1.01	OK	0
221.99	Acid Soluble Cu, Other (%)	0481	0.0580	0.0060	0.0604	0.0068	0.0056	6	-0.32	OK	0
221.99	Acid Soluble Cu, Other (%)	0515	0.0589	0.0039	0.0604	0.0068	0.0056	6	-0.21	OK	0
221.99	Acid Soluble Cu, Other (%)	0405	0.0594	0.0021	0.0604	0.0068	0.0056	6	-0.14	OK	0
221.99	Acid Soluble Cu, Other (%)	0506	0.0630	0.0020	0.0604	0.0068	0.0056	6	0.34	OK	0
221.99	Acid Soluble Cu, Other (%)	0523	0.0738	0.0195	0.0604	0.0068	0.0056	6	1.76	High	0
221.99	Acid Soluble Cu, Other (%)	0389	0.3020	0.4960	0.0604	0.0068	0.0056	6	31.82	High	1
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	0553	0.7475	0.0150	0.8425	0.0823	0.0183	3	-1.15		0
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	0535	0.8900	0.0200	0.8425	0.0823	0.0183	3	0.58		0
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	0539	0.8900	0.0200	0.8425	0.0823	0.0183	3	0.58		0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0472	0.7200	0.0000	0.8922	0.2322	0.3872	5	-0.74		0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0035	0.7610	0.1360	0.8922	0.2322	0.3872	5	-0.57		0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0354	0.7900	0.7800	0.8922	0.2322	0.3872	5	-0.44		0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0444	0.9000	0.0000	0.8922	0.2322	0.3872	5	0.03		0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0552	1.290	1.020	0.8922	0.2322	0.3872	5	1.71		0
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (%)	0423	0.8190	0.0080				1			0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0494	0.8343	0.0028	0.8680	0.0368	0.0076	5	-0.80		0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0546	0.8367	0.0018	0.8680	0.0368	0.0076	5	-0.74		0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0106	0.8700	0.0067	0.8680	0.0368	0.0076	5	0.05		0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0368	0.8740	0.0100	0.8680	0.0368	0.0076	5	0.14		0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0527	0.9251	0.0165	0.8680	0.0368	0.0076	5	1.35		0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0515	0.8591	0.1393	0.8680	0.0368	0.0076	5	-0.21		1
241.99	Acid Soluble Fe, Other (%)	0515	0.7907	0.0251	0.8627	0.0930	0.0729	4	-0.77		0
241.99	Acid Soluble Fe, Other (%)	0524	0.8129	0.0480	0.8627	0.0930	0.0729	4	-0.54		0
241.99	Acid Soluble Fe, Other (%)	0389	0.8500	0.0000	0.8627	0.0930	0.0729	4	-0.14		0
241.99	Acid Soluble Fe, Other (%)	0523	0.9973	0.2185	0.8627	0.0930	0.0729	4	1.45		0
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	46.50	2.840				1			0
251.30	Acid Soluble Pb, ICP (ppm)	0524	6.135	0.1674	9.347	2.853	0.3153	9	-1.04	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0444	6.660	0.5600	9.347	2.853	0.3153	9	-0.87	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0255	7.579	0.8650	9.347	2.853	0.3153	9	-0.57	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0394	8.593	0.3250	9.347	2.853	0.3153	9	-0.24	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0389	9.115	0.1500	9.347	2.853	0.3153	9	-0.08	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0415	9.300	0.0000	9.347	2.853	0.3153	9	-0.02	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0523	10.77	0.4700	9.347	2.853	0.3153	9	0.46	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0450	12.35	0.1000	9.347	2.853	0.3153	9	0.97	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0035	13.90	0.2000	9.347	2.853	0.3153	9	1.47	NA	0
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	0220	11.75	0.5000				1			0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0136	10.25	0.5000	12.56	2.768	0.6265	5	-0.73		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0037	11.32	0.6170	12.56	2.768	0.6265	5	-0.39		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0117	11.42	0.7160	12.56	2.768	0.6265	5	-0.36		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0527	12.50	0.2996	12.56	2.768	0.6265	5	-0.02		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0494	17.30	1.000	12.56	2.768	0.6265	5	1.50		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0515	13.74	4.684	12.56	2.768	0.6265	5	0.37		1
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0515	22.85	26.86				1			0
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0368	< 0.8					1			5
251.99	Acid Soluble Pb, Other (ppm)	0506	5.740	0.0400	8.776	3.488	0.2775	4	-0.87		0
251.99	Acid Soluble Pb, Other (ppm)	0481	5.865	0.0700	8.776	3.488	0.2775	4	-0.83		0
251.99	Acid Soluble Pb, Other (ppm)	0405	11.00	0.0000	8.776	3.488	0.2775	4	0.64		0
251.99	Acid Soluble Pb, Other (ppm)	0220	12.50	1.000	8.776	3.488	0.2775	4	1.07		0
261.00	Acid Soluble Mn, AA, Mn2+ only (%)	0553	0.3545	0.0150				1			0
261.12	Acid Soluble Mn, AA, inorganic 965.09 (%)	0535	0.3850	0.0100				2			0
261.12	Acid Soluble Mn, AA, inorganic 965.09 (%)	0539	0.3900	0.0400				2			0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0035	0.3545	0.0570	0.3686	0.0190	0.0193	4	-0.74		0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0444	0.3550	0.0100	0.3686	0.0190	0.0193	4	-0.72		0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0472	0.3700	0.0000	0.3686	0.0190	0.0193	4	0.07		0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0354	0.3950	0.0100	0.3686	0.0190	0.0193	4	1.39		0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (%)	0552	0.5050	0.1500				1			0
261.34	Acid Soluble Mn, ICP, test portion 2006.03A-C (%)	0423	0.3965	0.0070				1			0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0515	0.3362	0.0386	0.3807	0.0406	0.0122	6	-0.98	Low	0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0106	0.3495	0.0174	0.3807	0.0406	0.0122	6	-0.68	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0546	0.3715	0.0034	0.3807	0.0406	0.0122	6	-0.20	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				
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0494	0.3865	0.0090	0.3807	0.0406	0.0122	6	0.13	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0368	0.4098	0.0046	0.3807	0.0406	0.0122	6	0.64	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0527	0.4307	0.0004	0.3807	0.0406	0.0122	6	1.10	High	0
261.99	Acid Soluble Mn, Other (%)	0389	0.3900	0.0000	0.4150	0.0323	0.0558	4	-0.77		0
261.99	Acid Soluble Mn, Other (%)	0524	0.3928	0.0041	0.4150	0.0323	0.0558	4	-0.69		0
261.99	Acid Soluble Mn, Other (%)	0515	0.4175	0.1316	0.4150	0.0323	0.0558	4	0.08		0
261.99	Acid Soluble Mn, Other (%)	0523	0.4598	0.0875	0.4150	0.0323	0.0558	4	1.39		0
281.00	Acid Soluble Hg, AA (ppm)	0481	< 0.5					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0415	0.5000	0.0000				1			0
281.30	Acid Soluble Hg, ICP (ppm)	0515	0.0000	0.0000				1			4
281.30	Acid Soluble Hg, ICP (ppm)	0527	< 0.001					1			5
281.30	Acid Soluble Hg, ICP (ppm)	0450	< 0.5					1			5
281.99	Acid Soluble Hg, Other (ppm)	0550	0.0601	0.0192	0.1008	0.0304	0.0119	5	-1.34		0
281.99	Acid Soluble Hg, Other (ppm)	0524	0.0837	0.0004	0.1008	0.0304	0.0119	5	-0.56		0
281.99	Acid Soluble Hg, Other (ppm)	0405	0.1050	0.0100	0.1008	0.0304	0.0119	5	0.14		0
281.99	Acid Soluble Hg, Other (ppm)	0415	0.1150	0.0100	0.1008	0.0304	0.0119	5	0.47		0
281.99	Acid Soluble Hg, Other (ppm)	0220	0.1400	0.0200	0.1008	0.0304	0.0119	5	1.29		0
289.30	Acid Soluble Mo, ICP (ppm)	0524	3.893	0.0958	10.97	10.92	0.3469	3	-0.65		0
289.30	Acid Soluble Mo, ICP (ppm)	0035	5.460	0.4800	10.97	10.92	0.3469	3	-0.50		0
289.30	Acid Soluble Mo, ICP (ppm)	0255	23.55	0.4650	10.97	10.92	0.3469	3	1.15		0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0515	3.468	0.6121	6.208	1.876	1.167	8	-1.34	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0423	4.850	0.2200	6.208	1.876	1.167	8	-0.66	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0494	5.925	0.2100	6.208	1.876	1.167	8	-0.14	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0136	5.985	0.6900	6.208	1.876	1.167	8	-0.11	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0546	6.093	2.173	6.208	1.876	1.167	8	-0.06	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0037	7.108	0.9930	6.208	1.876	1.167	8	0.44	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0527	7.232	0.4364	6.208	1.876	1.167	8	0.50	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0106	9.000	4.000	6.208	1.876	1.167	8	1.36	OK	0
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	0515	5.728	9.471				2			0
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	0368	8.402	0.6731				2			0
289.99	Acid Soluble Mo, Other (ppm)	0405	7.855	0.3300				1			0
289.99	Acid Soluble Mo, Other (ppm)	0481	< 50					1			5
291.00	Acid Soluble Ni, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	25.63	0.8000				1			0
291.30	Acid Soluble Ni, ICP (ppm)	0524	26.26	1.781	35.82	9.406	2.664	7	-0.92	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0444	28.24	0.1400	35.82	9.406	2.664	7	-0.73	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0035	33.10	4.400	35.82	9.406	2.664	7	-0.26	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0394	33.60	4.200	35.82	9.406	2.664	7	-0.21	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0415	36.60	0.0000	35.82	9.406	2.664	7	0.07	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0523	43.03	5.130	35.82	9.406	2.664	7	0.69	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0450	76.50	3.000	35.82	9.406	2.664	7	3.91	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0136	38.55	0.3000	44.92	4.342	1.926	6	-1.31	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0527	43.77	0.1441	44.92	4.342	1.926	6	-0.24	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0494	44.10	0.8000	44.92	4.342	1.926	6	-0.17	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0515	45.49	6.544	44.92	4.342	1.926	6	0.12	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0037	48.77	2.998	44.92	4.342	1.926	6	0.79	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0117	48.87	0.7690	44.92	4.342	1.926	6	0.81	NA	0
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0515	45.85	11.86				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				
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0368	46.00	0.4870				2			0
291.99	Acid Soluble Ni, Other (ppm)	0255	33.67	3.241	40.99	5.007	2.510	4	-1.46		0
291.99	Acid Soluble Ni, Other (ppm)	0405	42.50	5.000	40.99	5.007	2.510	4	0.30		0
291.99	Acid Soluble Ni, Other (ppm)	0481	42.80	0.8000	40.99	5.007	2.510	4	0.36		0
291.99	Acid Soluble Ni, Other (ppm)	0506	45.00	1.000	40.99	5.007	2.510	4	0.80		0
301.00	Acid Soluble Se, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	0.7850	0.4700				1			0
301.30	Acid Soluble Se, ICP (ppm)	0523	2.021	0.1090				1			0
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	0220	0.4500	0.1000				1			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0037	2.770	0.0270				1			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0515	0.0024	0.0048				1			4
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0527	< 0.001					1			5
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0494	< 0.95					1			5
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0515	8.201	16.40				0			4
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0368	< 1.4					0			5
301.99	Acid Soluble Se, Other (ppm)	0220	0.5000	0.0000	2.082	2.320	0.6553	3	-0.68		0
301.99	Acid Soluble Se, Other (ppm)	0405	1.000	0.0000	2.082	2.320	0.6553	3	-0.47		0
301.99	Acid Soluble Se, Other (ppm)	0255	4.745	1.966	2.082	2.320	0.6553	3	1.15		0
301.99	Acid Soluble Se, Other (ppm)	0481	< 0.15		2.082	2.320	0.6553	3			5
311.00	Sodium, AA (%)	0553	0.2100	0.0040				1			0
311.32	Sodium, ICP, 2006.03 test portion (%)	0521	0.1918	0.0000				1			0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0035	0.1860	0.0200	0.2090	0.0220	0.0087	4	-1.05		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0423	0.1970	0.0040	0.2090	0.0220	0.0087	4	-0.55		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0368	0.2177	0.0084	0.2090	0.0220	0.0087	4	0.40		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0527	0.2354	0.0022	0.2090	0.0220	0.0087	4	1.20		0
311.99	Sodium, Other (%)	0354	0.2250	0.0100				1			0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0535	0.6350	0.0100	0.6866	0.0550	0.0273	4	-0.94		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0539	0.6500	0.0400	0.6866	0.0550	0.0273	4	-0.67		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0550	0.7065	0.0190	0.6866	0.0550	0.0273	4	0.36		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0553	0.7550	0.0400	0.6866	0.0550	0.0273	4	1.24		0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0472	0.6000	0.0000	0.6537	0.0574	0.0204	8	-0.85	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0402	0.6050	0.0100	0.6537	0.0574	0.0204	8	-0.78	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0433	0.6090	0.0200	0.6537	0.0574	0.0204	8	-0.71	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0035	0.6340	0.0740	0.6537	0.0574	0.0204	8	-0.31	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0234	0.6617	0.0079	0.6537	0.0574	0.0204	8	0.13	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0354	0.6800	0.0200	0.6537	0.0574	0.0204	8	0.42	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0444	0.7000	0.0200	0.6537	0.0574	0.0204	8	0.74	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0255	0.7495	0.0110	0.6537	0.0574	0.0204	8	1.53	High	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0552	0.8850	0.4300	0.6537	0.0574	0.0204	8	3.68	High	1
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0394	0.5923	0.0032	0.7192	0.1333	0.0345	3	-0.95		0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0095	0.7072	0.0863	0.7192	0.1333	0.0345	3	-0.09		0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0423	0.8580	0.0140	0.7192	0.1333	0.0345	3	1.04		0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0043	0.6150	0.0100	0.6587	0.0322	0.0200	9	-1.25	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0106	0.6327	0.0653	0.6587	0.0322	0.0200	9	-0.75	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0368	0.6451	0.0112	0.6587	0.0322	0.0200	9	-0.39	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0494	0.6492	0.0387	0.6587	0.0322	0.0200	9	-0.27	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0136	0.6550	0.0100	0.6587	0.0322	0.0200	9	-0.10	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0421	0.6561	0.0071	0.6587	0.0322	0.0200	9	-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				
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0037	0.6843	0.0022	0.6587	0.0322	0.0200	9	0.73	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0546	0.6846	0.0338	0.6587	0.0322	0.0200	9	0.74	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0527	0.7061	0.0017	0.6587	0.0322	0.0200	9	1.36	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0515	0.7822	0.3001	0.6587	0.0322	0.0200	9	3.54	High	1
321.99	Acid Soluble Zn, Other (%)	0524	0.5169	0.0015	0.6570	0.1114	0.0074	6	-1.12	Low	0
321.99	Acid Soluble Zn, Other (%)	0405	0.6192	0.0013	0.6570	0.1114	0.0074	6	-0.30	OK	0
321.99	Acid Soluble Zn, Other (%)	0389	0.6350	0.0100	0.6570	0.1114	0.0074	6	-0.18	OK	0
321.99	Acid Soluble Zn, Other (%)	0481	0.6400	0.0200	0.6570	0.1114	0.0074	6	-0.14	OK	0
321.99	Acid Soluble Zn, Other (%)	0506	0.7275	0.0050	0.6570	0.1114	0.0074	6	0.56	OK	0
321.99	Acid Soluble Zn, Other (%)	0515	0.8036	0.0067	0.6570	0.1114	0.0074	6	1.17	High	0
321.99	Acid Soluble Zn, Other (%)	0523	0.7048	0.0795	0.6570	0.1114	0.0074	6	0.38	OK	1

Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or -2 and -3 (warning) and Green = Z < 2 and >-2 (OK at 95%). Flags indicate data usage: 0 = Used, 1 = rejected for duplicates too far apart, 2 = rejected as extreme outlier, 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.