

Method PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Methods: 79

Sample # 230851

Potassium Select PT Scheme

Labs Reporting: 12

K-Mg-SO4

Statistical Summary

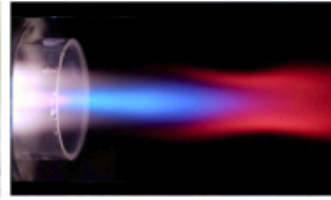
Issue Date : 09/30/2023

Method Code	Analyte & Method Sample # 230851	# 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
050.00	Soluble K2O, STPB Oxalate (21.5%)	6	6	22.32	0.4409	22.32	1.1596	0.5000	0.2551	2.24%	1.00	0.1180	2.12%
050.50	Soluble K2O, ICP (Oxalate) (21.5%)	1		24.72									
050.52	Soluble K2O, ICP (Citrate-EDTA) (21.5%)	2	2	22.94	0.9793								
050.99	Soluble K2O, Other (21.5%)	5	5	22.82	2.245	22.82	1.1746	2.245	1.255	9.84%	4.45	0.2860	2.09%
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	1		0.1093									
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (10.8%)	1		11.17									
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (10.8%)	1		10.95									
121.33	Acid Soluble Mg, ICP, 2017.02 (10.8%)	4	4	11.17	0.6487	11.17	0.7587	0.6487	0.4054	5.81%	1.99	0.5302	2.78%
121.70	Acid Soluble Mg, Titrimetric (EDTA) (10.8%)	1		11.67									
121.99	Acid Soluble Mg, Other (10.8%)	1		11.08									
131.70	Water Soluble Mg, Titrimetric (EDTA) (%)	1		11.25									
143.00	Elemental S, Gravimetric Sulfur - carbon disulfide soluble sulfu	1		0.0200									
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	3	3	23.23	0.4217	23.23		0.4217	0.3044	1.82%		0.0367	2.07%
148.00	Total S, Combustion (22%)	1		22.45									
148.01	Total S, Gravimetric - sulfate and elemental (22%)	1		22.54									
148.07	Total S, ICP, test portion as in 2017.02 (22%)	2	2	23.17	0.0244								
148.99	Total S, Other (22%)	3	3	22.86	0.8351	22.86	1.0000	0.8351	0.6027	3.65%	1.95	0.2100	2.09%
149.04	S - HNO3 soluble, ICP (%)	1		23.81									
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	1		3.000									
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	1		1.420									
151.99	Acid Soluble As, Other (ppm)	2	0	0.5000	0.0000								
165.00	Acid Soluble B, Spectrophotometric (%)	1		0.0100									
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	1		0.0010									
171.10	Water Soluble B, Spectrophotometric (%)	1		0.0100									
171.99	Water Soluble B, Other (%)	1		0.0010									
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acic	1		1.000									
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	2	1	0.5500	0.6364								
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	2	1	0.1894	0.0274								
181.99	Acid Soluble Cd, Other (ppm)	2	1	0.5500	0.6364								

Method Code	Analyte & Method Sample # 230851	# 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
190.00	Water Soluble Cl, Titrimetric (1.5%)	4	4	0.9119	0.2539	0.9119	0.0962	0.2539	0.1587	27.84%	6.15	0.0096	4.06%
190.99	Water Soluble Cl, Other (1.5%)	2	2	0.7598	0.0144								
191.00	Acid Soluble Cr, AA, test portion 2006.03 modified w/dual acid	1		5.000									
191.30	Acid Soluble Cr, ICP (ppm)	1		5.000									
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	2	1	1.150	0.2121								
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	2	1	0.9631	0.0610								
191.99	Acid Soluble Cr, Other (ppm)	1		1.200									
202.00	Acid Soluble Co, AA, test portion 2006.03 modified w/dual acid	1		5.000									
202.30	Acid Soluble Co, ICP (ppm)	1		5.000									
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	2	1	0.5500	0.6364								
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	2	1	0.5083	0.2711								
202.99	Acid Soluble Co, Other (ppm)	1		0.1000									
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	1		0.0005									
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	1		0.0002									
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	3	1	1.147	1.986	0.7598	0.0810	0.0144	0.0180	1.89%	0.41	0.0009	4.17%
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	1		0.0062									
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	2	2	0.0076	0.0019								
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid	1		10.00									
251.30	Acid Soluble Pb, ICP (ppm)	1		5.000									
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	2	0	2.350	2.333								
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	2	1	1.047	0.1798								
251.99	Acid Soluble Pb, Other (ppm)	1		0.7000									
261.11	Acid Soluble Mn, AA, total Mn (%)	1		0.0007									
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	1		0.0007									
271.00	Water Soluble Mn, AA (%)	1		0.0005									
271.30	Water Soluble Mn, ICP, Ext. 972.03 (%)	1		0.0005									
281.00	Acid Soluble Hg, AA (ppm)	1		0.0100									
281.30	Acid Soluble Hg, ICP (ppm)	1		2.000									
281.99	Acid Soluble Hg, Other (ppm)	2	1	0.0061	0.0056								
289.30	Acid Soluble Mo, ICP (ppm)	1		10.00									
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	2	0	0.6500	0.4950								
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	1		0.2386									
289.99	Acid Soluble Mo, Other (ppm)	1		0.4500									
291.00	Acid Soluble Ni, AA, test portion 2006.03 modified w/dual acid	1		10.00									
291.30	Acid Soluble Ni, ICP (ppm)	1		5.000									
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	2	2	1.050	0.6364								
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	2	1	0.6284	0.3654								
291.99	Acid Soluble Ni, Other (ppm)	1		0.5500									
301.00	Acid Soluble Se, AA, test portion 2006.03 modified w/dual acid	1		1.000									
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	2	0	5.150	6.859								

Method Code	Analyte & Method Sample # 230851	# 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
301.99	Acid Soluble Se, Other (ppm)	1		0.3000									
311.30	Sodium, Flame Photometric (%)	1		0.5155									
311.33	Sodium, ICP, test portion as in 2017.02 (%)	1		0.4508									
311.99	Sodium, Other (%)	1		0.2500									
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	1		0.0005									
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	2	1	0.0003	0.0000								
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	3	1	1.087	1.881	1.050	0.1100	0.6364	0.7955	60.61%	13.48	0.4000	3.97%
321.99	Acid Soluble Zn, Other (%)	1		0.0005									
325.00	Water Soluble Zn, AA (%)	1		0.0005									
325.30	Water Soluble Zn, ICP (%)	1		0.0005									

The Method IA Ratio = $2.33 * \text{Robust SD} / \text{IA at the Method Assigned Value}$. 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. The Horwitz %RSD is calculated using the Thompson Modification, Analyst,2000,125,385-386.



Method PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Sample # 230851

Potassium Select PT Scheme

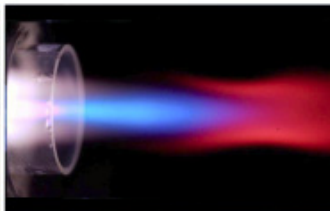
K-Mg-SO4

Method Precision Report

Issue Date : 09/30/2023

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
050.00	Soluble K2O, STPB Oxalate (21.5%)	6	6	22.32	0.4409	0.4369	0.0838	0.4449	1.96%	0.38%	1.99%	5.308
050.99	Soluble K2O, Other (21.5%)	5	5	22.82	2.245	2.236	0.2758	2.253	9.80%	1.21%	9.87%	8.170

Notes: Precision data calculated when 5 or more Tests included.



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Methods: 79

Sample # 230851

Potassium Select PT Scheme

Labs Reporting: 12

K-Mg-SO4

Lab Values

Issue Date : 09/30/2023

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
050.00	Soluble K2O, STPB Oxalate (21.5%)	0405	21.59	0.0000	22.32	0.5000	0.1180	6	-1.30	OK	0
050.00	Soluble K2O, STPB Oxalate (21.5%)	0494	22.27	0.1200	22.32	0.5000	0.1180	6	-0.09	OK	0
050.00	Soluble K2O, STPB Oxalate (21.5%)	0597	22.29	0.1300	22.32	0.5000	0.1180	6	-0.06	OK	0
050.00	Soluble K2O, STPB Oxalate (21.5%)	0561	22.30	0.2100	22.32	0.5000	0.1180	6	-0.04	OK	0
050.00	Soluble K2O, STPB Oxalate (21.5%)	0220	22.53	0.0800	22.32	0.5000	0.1180	6	0.38	OK	0
050.00	Soluble K2O, STPB Oxalate (21.5%)	0626	22.95	0.0500	22.32	0.5000	0.1180	6	1.11	OK	0
050.50	Soluble K2O, ICP (Oxalate) (21.5%)	0086	24.72	0.7287				1			0
050.52	Soluble K2O, ICP (Citrate-EDTA) (21.5%)	0040	22.25	0.1000				2			0
050.52	Soluble K2O, ICP (Citrate-EDTA) (21.5%)	0494	23.64	0.0700				2			0
050.99	Soluble K2O, Other (21.5%)	0611	20.50	0.6000	22.82	2.245	0.2860	5	-1.03		0
050.99	Soluble K2O, Other (21.5%)	0615	21.50	0.2000	22.82	2.245	0.2860	5	-0.59		0
050.99	Soluble K2O, Other (21.5%)	0590	22.53	0.0200	22.82	2.245	0.2860	5	-0.13		0
050.99	Soluble K2O, Other (21.5%)	0626	23.18	0.0100	22.82	2.245	0.2860	5	0.16		0
050.99	Soluble K2O, Other (21.5%)	0042	26.40	0.6000	22.82	2.245	0.2860	5	1.59		0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0494	0.1093	0.0022				1			0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (10.8%)	0220	11.17	0.2500				1			0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (10.8%)	0405	10.95	0.1000				1			0
121.33	Acid Soluble Mg, ICP, 2017.02 (10.8%)	0040	10.32	1.290	11.17	0.6487	0.5302	4	-1.32		0
121.33	Acid Soluble Mg, ICP, 2017.02 (10.8%)	0494	11.18	0.2439	11.17	0.6487	0.5302	4	0.01		0
121.33	Acid Soluble Mg, ICP, 2017.02 (10.8%)	0561	11.32	0.2300	11.17	0.6487	0.5302	4	0.22		0
121.33	Acid Soluble Mg, ICP, 2017.02 (10.8%)	0086	11.88	0.3568	11.17	0.6487	0.5302	4	1.10		0
121.70	Acid Soluble Mg, Titrimetric (EDTA) (10.8%)	0626	11.67	0.0000				1			0
121.99	Acid Soluble Mg, Other (10.8%)	0042	11.08	0.9600				1			0
131.70	Water Soluble Mg, Titrimetric (EDTA) (%)	0626	11.25	0.0600				1			0
143.00	Elemental S, Gravimetric Sulfur - carbon disulfide soluble sulfur	0405	0.0200	0.0000				1			0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0405	22.86	0.0400	23.23	0.4217	0.0367	3	-0.88		0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0561	23.15	0.0100	23.23	0.4217	0.0367	3	-0.21		0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0220	23.69	0.0600	23.23	0.4217	0.0367	3	1.09		0
148.00	Total S, Combustion (22%)	0405	22.45	0.1000				1			0
148.01	Total S, Gravimetric - sulfate and elemental (22%)	0626	22.54	0.1000				1			0
148.07	Total S, ICP, test portion as in 2017.02 (22%)	0040	23.15	0.1000				2			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
148.07	Total S, ICP, test portion as in 2017.02 (22%)	0494	23.18	1.949				2			0
148.99	Total S, Other (22%)	0597	22.02	0.3800	22.86	0.8351	0.2100	3	-1.01		0
148.99	Total S, Other (22%)	0405	22.88	0.0400	22.86	0.8351	0.2100	3	0.02		0
148.99	Total S, Other (22%)	0220	23.69	0.0000	22.86	0.8351	0.2100	3	0.99		0
149.04	S - HNO3 soluble, ICP (%)	0086	23.81	0.7611				1			0
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	0405	< 3					0			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0494	< 1.42					0			5
151.99	Acid Soluble As, Other (ppm)	0220	< 0.5					0			5
151.99	Acid Soluble As, Other (ppm)	0626	< 0.5					0			5
165.00	Acid Soluble B, Spectrophotometric (%)	0626	< 0.01					0			5
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0626	< 0.001					0			5
171.10	Water Soluble B, Spectrophotometric (%)	0626	< 0.01					0			5
171.99	Water Soluble B, Other (%)	0626	< 0.001					0			5
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid	0626	< 1					0			5
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	0220	0.1000	0.0000				1			0
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	0405	< 1					1			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0086	0.2088	0.0081				1			0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0494	< 0.17					1			5
181.99	Acid Soluble Cd, Other (ppm)	0220	0.1000	0.0000				1			0
181.99	Acid Soluble Cd, Other (ppm)	0626	< 1					1			5
190.00	Water Soluble Cl, Titrimetric (1.5%)	0220	0.7450	0.0100	0.9119	0.2539	0.0096	4	-0.66		0
190.00	Water Soluble Cl, Titrimetric (1.5%)	0626	0.7499	0.0008	0.9119	0.2539	0.0096	4	-0.64		0
190.00	Water Soluble Cl, Titrimetric (1.5%)	0561	0.8700	0.0000	0.9119	0.2539	0.0096	4	-0.17		0
190.00	Water Soluble Cl, Titrimetric (1.5%)	0405	1.283	0.0179	0.9119	0.2539	0.0096	4	1.46		0
190.99	Water Soluble Cl, Other (1.5%)	0626	0.7497	0.0009				2			0
190.99	Water Soluble Cl, Other (1.5%)	0611	0.7700	0.0800				2			0
191.00	Acid Soluble Cr, AA, test portion 2006.03 modified w/dual acid	0626	< 5					0			5
191.30	Acid Soluble Cr, ICP (ppm)	0626	< 5					0			5
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	0220	1.300	0.6000				1			0
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	0405	< 1					1			5
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0086	1.006	0.1223				1			0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0494	< 0.92					1			5
191.99	Acid Soluble Cr, Other (ppm)	0220	1.200	0.0000				1			0
202.00	Acid Soluble Co, AA, test portion 2006.03 modified w/dual acid	0626	< 5					0			5
202.30	Acid Soluble Co, ICP (ppm)	0626	< 5					0			5
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0220	0.1000	0.0000				1			0
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0405	< 1					1			5
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0086	0.3166	0.1294				1			0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0494	< 0.7					1			5
202.99	Acid Soluble Co, Other (ppm)	0220	0.1000	0.0000				1			0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	0626	< 0.0005					0			5
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	0405	< 0.0002					0			5
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0086	3.440	0.2536				1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0494	< 0.0002					1			5
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0626	< 0.0005					1			5
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	0626	0.0062	0.0002				1			0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0626	0.0062	0.0004				2			0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0494	0.0090	0.0003				2			0
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid	0626	< 10					0			5
251.30	Acid Soluble Pb, ICP (ppm)	0626	< 5					0			5
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	0220	< 0.7					0			5
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	0405	< 4					0			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0086	1.174	0.2596				1			0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0494	< 0.92					1			5
251.99	Acid Soluble Pb, Other (ppm)	0220	< 0.7					0			5
261.11	Acid Soluble Mn, AA, total Mn (%)	0626	0.0007	0.0000				1			0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0626	0.0007	0.0001				1			0
271.00	Water Soluble Mn, AA (%)	0626	< 0.0005					0			5
271.30	Water Soluble Mn, ICP, Ext. 972.03 (%)	0626	< 0.0005					0			5
281.00	Acid Soluble Hg, AA (ppm)	0626	< 0.01					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0405	< 2					0			5
281.99	Acid Soluble Hg, Other (ppm)	0626	0.0022	0.0001				1			0
281.99	Acid Soluble Hg, Other (ppm)	0220	< 0.01					1			5
289.30	Acid Soluble Mo, ICP (ppm)	0626	< 10					0			5
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	0220	< 0.3					0			5
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	0405	< 1					0			5
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0086	0.2386	0.1084				1			0
289.99	Acid Soluble Mo, Other (ppm)	0220	0.4500	0.1000				1			0
291.00	Acid Soluble Ni, AA, test portion 2006.03 modified w/dual acid (0626	< 10					0			5
291.30	Acid Soluble Ni, ICP (ppm)	0626	< 5					0			5
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	0220	0.6000	0.4000				2			0
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	0405	1.500	1.000				2			0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0086	0.8867	0.1812				1			0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0494	< 0.37					1			5
291.99	Acid Soluble Ni, Other (ppm)	0220	0.5500	0.1000				1			0
301.00	Acid Soluble Se, AA, test portion 2006.03 modified w/dual acid	0626	< 1					0			5
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	0220	< 0.3					0			5
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	0405	< 10					0			5
301.99	Acid Soluble Se, Other (ppm)	0220	< 0.3					0			5
311.30	Sodium, Flame Photometric (%)	0626	0.5155	0.0010				1			0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0494	0.4508	0.0040				1			0
311.99	Sodium, Other (%)	0611	0.2500	0.0000				1			0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0626	< 0.0005					0			5
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0220	0.0003	0.0003				1			0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0405	< 0.0003					1			5
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0086	3.259	0.7931				1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0494	< 0.0005					1			5
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0626	< 0.0005					1			5
321.99	Acid Soluble Zn, Other (%)	0220	0.0005	0.0000				1			0
325.00	Water Soluble Zn, AA (%)	0626	< 0.0005					0			5
325.30	Water Soluble Zn, ICP (%)	0626	< 0.0005					0			5

Interpreting Z Scores and Flags:

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.

Notes:

*Robust statistics not used if < 6 labs used in calculations, in this case Values and Z Scores are grayed out and should be interpreted with extreme caution. Identical duplicates not included in calculation of Rob R-bar. IA Status describes where your result is relative to the Assigned Value ± IA. Red indicates Higher or Lower and Green indicates within the IA range about the Robust mean. Method codes in light green indicate a guaranteed analyte. Individual lab values may be below detection limits but are reported solely for