



Method PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Methods: 106

Sample # 241011

Regular PT Scheme

Labs Reporting: 81

Liquid AmmPolyP

Statistical Summary

Issue Date : 11/30/2024

Method Code	Analyte & Method Sample # 241011	# 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
001.10	Ammoniacal N, Magnesium Oxide Method (%)	7	7	11.05	0.2794	11.05		0.3169	0.1497	2.87%		0.1600	2.79%
001.99	Ammoniacal N, Other (%)	22	22	11.06	0.3590	11.12		0.2022	0.0539	1.82%		0.1181	2.78%
002.99	Nitrate N, Other (%)	1		0.3850									
005.99	Urea N, Other (%)	2	2	5.915	7.927								
009.10	Ammoniacal Plus Nitrate N, Devarda (%)	2	2	11.32	0.0424								
010.11	Total N, Modified Comprehensive (11%)	2	2	11.21	0.1135								
010.12	Total N, Salicylic (11%)	1		10.65									
010.60	Total N, Combustion (11%)	51	49	11.16	0.3537	11.19	0.5978	0.2242	0.0400	2.00%	0.87	0.1050	2.78%
010.99	Total N, Other (11%)	10	10	11.20	0.1738	11.20	0.5980	0.1961	0.0775	1.75%	0.76	0.0729	2.78%
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	4	4	37.07	1.730	37.07		1.730	1.081	4.67%		0.2200	1.64%
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	10	10	37.37	0.3215	37.37		0.3205	0.1267	0.86%		0.2549	1.64%
020.40	Total P2O5, Automated (%)	2	2	36.68	2.227								
020.50	Total P2O5, ICP (%)	19	19	36.26	2.936	36.50		2.636	0.7559	7.22%		0.4534	1.66%
020.99	Total P2O5, Other (%)	7	6	39.37	6.122	36.91		0.2874	0.1466	0.78%		0.0809	1.65%
040.99	Indirect Available P2O5, Other (37%)	1		37.46									
041.10	Direct Available P2O5, Gravimetric Quinolinium (37%)	6	6	37.10	1.595	37.42	0.8512	1.004	0.5121	2.68%	2.75	0.1710	1.63%
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA	8	7	37.29	0.8248	37.40	0.8509	0.7504	0.3545	2.01%	2.05	0.1023	1.64%
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext.	7	7	31.99	9.290	33.40	0.7809	7.000	3.307	20.96%	20.89	0.5160	1.73%
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (37%)	2	2	36.80	0.1167								
041.50	Direct Available P2O5, ICP (37%)	3	3	37.78	1.032	37.78	0.8567	1.032	0.7447	2.73%	2.81	0.3161	1.63%
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (37%)	7	7	37.49	0.5585	37.49	0.8524	0.6334	0.2992	1.69%	1.73	0.3896	1.63%
041.99	Direct Available P2O5, Other (37%)	6	6	37.96	6.058	37.96	0.8594	6.870	3.506	18.10%	18.63	0.3800	1.62%
042.10	Water Soluble OrthoP As P2O5, Spectrophotometric (%)	1		11.44									
048.10	Water Soluble P2O5, Gravimetric Quinolinium (%)	2	2	37.14	1.220								
048.20	Water Soluble P2O5, Spectrophotometric (%)	2	2	13.32	2.314								
048.50	Water Soluble P2O5, ICP (%)	1		36.26									
048.99	Water Soluble P2O5, Other (%)	1		38.00									
050.50	Soluble K2O, ICP (Oxalate) (%)	1		0.1425									
050.51	Soluble K2O, ICP (Citrate) (%)	1		37.67									

Method Code	Analyte & Method Sample # 241011	# 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
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	1		0.1615									
050.99	Soluble K2O, Other (%)	4	4	0.1774	0.0262	0.1774	0.4100	0.0262	0.0164	14.77%	0.15	0.0186	5.19%
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	1		0.0550									
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	3	1	0.0267	0.0153	0.1774	0.2089	0.0262	0.0327	14.77%	0.29	0.0031	5.19%
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	2	2	0.0923	0.0173								
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	4	4	0.0726	0.0167	0.0726	0.2036	0.0167	0.0105	23.06%	0.19	0.0090	5.94%
121.99	Acid Soluble Mg, Other (%)	2	2	0.0784	0.0056								
145.99	Sulfate S, HCl soluble, Other (%)	1		0.3950									
148.07	Total S, ICP, test portion as in 2017.02 (%)	3	2	0.4323	0.3042	0.5985	0.2299	0.1392	0.1231	23.26%	1.41	0.1314	4.32%
148.99	Total S, Other (%)	2	2	0.5146	0.0995								
149.04	S - HNO3 soluble, ICP (%)	1		0.5157									
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid	1		1.200									
151.30	Acid Soluble As, ICP (ppm)	4	2	2.137	2.765	1.174		0.1222	0.1080	10.41%		0.0293	15.61%
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	3	2	1.780	1.063	1.170		0.1697	0.1500	14.50%		0.1000	15.62%
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	5	4	2.144	1.663	1.430		0.5367	0.3354	37.53%		0.1807	15.16%
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	2	2	5.786	5.040								
151.99	Acid Soluble As, Other (ppm)	2	2	1.150	0.2828								
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	1		0.0100									
165.99	Acid Soluble B, Other (%)	5	5	0.0096	0.0060	0.0096	0.0044	0.0060	0.0033	62.63%	3.15	0.0005	8.05%
181.30	Acid Soluble Cd, ICP (ppm)	6	6	13.23	0.8280	13.36		0.6116	0.3121	4.58%		0.2183	10.83%
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	2	2	14.08	1.308								
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	5	5	13.63	0.6199	13.63		0.6199	0.3466	4.55%		0.3639	10.80%
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	2	2	12.15	1.411								
181.99	Acid Soluble Cd, Other (ppm)	3	3	13.03	1.531	13.03		1.531	1.105	11.75%		0.6700	10.87%
191.30	Acid Soluble Cr, ICP (ppm)	5	5	184.1	14.22	184.1		14.22	7.951	7.72%		4.239	7.30%
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	2	2	195.4	17.85								
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	5	5	193.0	4.074	193.0		4.074	2.277	2.11%		6.735	7.25%
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	2	2	176.9	9.723								
191.99	Acid Soluble Cr, Other (ppm)	2	2	192.3	10.96								
202.00	Acid Soluble Co, AA, test portion 2006.03 modified w/dual acid	1		2.000									
202.30	Acid Soluble Co, ICP (ppm)	2	2	0.5937	0.8381								
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	2	0	0.5500	0.6364								
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	5	1	0.5359	0.8416	0.5937	1.1781	0.8381	1.048	141.18%	1.66	0.0406	17.30%
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	2	1	0.6145	0.7276								
202.99	Acid Soluble Co, Other (ppm)	3	2	1.290	1.844	1.809	1.5428	2.276	2.012	125.79%	3.44	1.115	14.63%
221.03	Acid Soluble Cu, AA, 965.09, test portion 2006.03A-C w/dual ε	1		2.000									
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	4	2	0.0029	0.0047	0.0009	0.0051	0.0007	0.0007	84.85%	0.34	0.0004	11.54%
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	1		0.0002									
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	8	1	0.0004	0.0008	0.0009	0.0051	0.0007	0.0009	84.85%	0.34	0.0001	11.54%
221.99	Acid Soluble Cu, Other (%)	3	1	0.1003	0.1729	0.0009	0.0051	0.0007	0.0009	84.85%	0.34	0.0001	11.54%

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241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	3	3	0.4402	0.0274	0.4402	0.0490	0.0274	0.0198	6.22%	1.30	0.0075	4.53%
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	4	4	0.4398	0.0286	0.4398	0.0490	0.0286	0.0179	6.51%	1.36	0.0165	4.53%
241.99	Acid Soluble Fe, Other (%)	2	2	0.3853	0.0251								
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid	1		0.5000									
251.30	Acid Soluble Pb, ICP (ppm)	4	1	1.355	2.437	0.3853		0.0251	0.0314	6.52%		0.0117	18.47%
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	2	1	2.100	2.687								
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	5	0	2.042	2.510	0.3853		0.0251		6.52%		0.0117	18.47%
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	2	1	0.7330	0.7311								
251.99	Acid Soluble Pb, Other (ppm)	2	1	1.350	1.626								
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	2	1	0.0082	0.0025								
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	3	3	0.0058	0.0001	0.0058	0.0056	0.0001	0.0001	1.80%	0.04	0.0003	8.69%
261.99	Acid Soluble Mn, Other (%)	2	1	0.0031	0.0028								
281.00	Acid Soluble Hg, AA (ppm)	1		0.5000									
281.30	Acid Soluble Hg, ICP (ppm)	6	0	0.6435	0.8141	0.0058		0.0001		1.80%		0.0001	22.00%
281.99	Acid Soluble Hg, Other (ppm)	3	2	0.0501	0.0780	0.0051		0.0069	0.0061	135.88%		0.0002	22.00%
289.30	Acid Soluble Mo, ICP (ppm)	4	4	8.716	0.3605	8.716	3.6148	0.3605	0.2253	4.14%	0.23	0.2504	11.55%
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	2	2	8.500	0.7071								
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	7	7	8.647	0.9099	8.647	3.5940	1.032	0.4875	11.93%	0.67	0.3320	11.56%
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	2	2	8.186	0.6565								
289.99	Acid Soluble Mo, Other (ppm)	2	2	8.450	0.6364								
291.30	Acid Soluble Ni, ICP (ppm)	4	2	0.7780	1.087	0.1559		0.0051	0.0045	3.24%		0.0390	21.16%
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	2	1	0.6250	0.5303								
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	5	0	0.7620	1.267	0.1559		0.0051		3.24%		0.0030	21.16%
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	2	1	0.2793	0.1121								
291.99	Acid Soluble Ni, Other (ppm)	3	2	5.525	7.322	7.037		9.669	8.546	137.40%		20.41	11.93%
301.30	Acid Soluble Se, ICP (ppm)	3	2	0.6415	0.8767	0.1373		0.1078	0.0953	78.49%		0.0069	21.57%
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	3	0	3.480	5.647	0.1373		0.1078		78.49%		0.0008	21.57%
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	3	1	7.649	12.44	0.1373		0.1078	0.1347	78.49%		0.0008	21.57%
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	2	0	0.8130	0.8301								
301.99	Acid Soluble Se, Other (ppm)	3	0	0.1833	0.1607	0.1373		0.1078		78.49%		0.0008	21.57%
311.33	Sodium, ICP, test portion as in 2017.02 (%)	3	3	0.1077	0.0122	0.1077	0.0158	0.0122	0.0088	11.36%	1.81	0.0019	5.59%
311.99	Sodium, Other (%)	2	2	347.6	491.3								
321.03	Acid Soluble Zn, AA, 965.09, test portion 2006.03A-C w/dual a	1		0.0270									
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	4	4	0.0261	0.0044	0.0261	0.0076	0.0044	0.0028	17.06%	1.36	0.0010	6.92%
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	3	3	0.0271	0.0026	0.0271	0.0077	0.0026	0.0019	9.51%	0.78	0.0009	6.88%
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	8	8	0.0299	0.0072	0.0297	0.0080	0.0079	0.0035	26.45%	2.30	0.0044	6.79%
321.99	Acid Soluble Zn, Other (%)	5	5	41.52	92.79	41.52	1.0000	92.79	51.87	223.47%	216.19	5.001	1.55%

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. The Horwitz %RSD is calculated using the Thompson Modification, Analyst,2000,125,385-386.

Horwitz %RSD	
Average Range (R-bar)	
Method IA Ratio	
Robust % RSD	
Robust Uncertainty (U)	
Robust sd	
IA at Method Value	
Assigned Value Robust Mean	
Raw SD	
Raw Mean	
# Tests in Robust Calculations	
# Tests Submitted	
Analyte & Method Sample # 241011	
Method Code	



Method PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Sample # 241011

Regular PT Scheme

Liquid AmmPolyP

Method Precision Report

Issue Date : 11/30/2024

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 N, Magnesium Oxide Method (%)	7	7	11.05	0.2794	0.2624	0.1361	0.2955	2.37%	1.23%	2.68%	2.172
001.99	Ammoniacal N, Other (%)	22	20	11.12	0.1957	0.1802	0.1079	0.2100	1.62%	0.97%	1.89%	1.947
010.60	Total N, Combustion (11%)	51	46	11.19	0.1997	0.1886	0.0927	0.2102	1.69%	0.83%	1.88%	2.266
010.99	Total N, Other (11%)	10	10	11.20	0.1738	0.1655	0.0750	0.1817	1.48%	0.67%	1.62%	2.424
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	10	10	37.37	0.3215	0.2825	0.2168	0.3562	0.76%	0.58%	0.95%	1.643
020.50	Total P2O5, ICP (%)	19	18	36.37	2.982	2.947	0.6428	3.017	8.11%	1.77%	8.30%	4.693
020.99	Total P2O5, Other (%)	7	6	37.06	0.5980	0.5953	0.0804	0.6007	1.61%	0.22%	1.62%	7.470
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA E	8	6	37.58	0.4794	0.4769	0.0692	0.4819	1.27%	0.18%	1.28%	6.966
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (:	7	6	35.15	4.472	4.458	0.5094	4.487	12.68%	1.45%	12.77%	8.808
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (37%)	7	7	37.49	0.5585	0.5023	0.3452	0.6095	1.34%	0.92%	1.63%	1.766
041.99	Direct Available P2O5, Other (37%)	6	6	37.96	6.058	6.054	0.3265	6.063	15.95%	0.86%	15.97%	18.57
181.30	Acid Soluble Cd, ICP (ppm)	6	5	13.54	0.3333	0.3046	0.1913	0.3597	2.25%	1.41%	2.66%	1.880
191.30	Acid Soluble Cr, ICP (ppm)	5	5	184.1	14.22	14.03	3.325	14.42	7.62%	1.81%	7.83%	4.335
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	5	5	193.0	4.074	0.7455	5.664	5.712	0.39%	2.93%	2.96%	1.009
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	7	7	8.647	0.9099	0.8902	0.2667	0.9293	10.30%	3.08%	10.75%	3.484
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	8	8	0.0299	0.0072	0.0067	0.0037	0.0077	22.54%	12.26%	25.66%	2.092

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



Method PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Methods: 106

Sample # 241011

Regular PT Scheme

Labs Reporting: 81

Liquid AmmPolyP

Lab Values

Issue Date : 11/30/2024

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				
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0498	10.65	0.1000	11.05	0.3169	0.1600	7	-1.13	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0389	10.76	0.0800	11.05	0.3169	0.1600	7	-0.82	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0451	10.89	0.3200	11.05	0.3169	0.1600	7	-0.45	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0231	11.13	0.0200	11.05	0.3169	0.1600	7	0.24	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0619	11.25	0.3000	11.05	0.3169	0.1600	7	0.58	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0136	11.30	0.2000	11.05	0.3169	0.1600	7	0.72	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0444	11.35	0.1000	11.05	0.3169	0.1600	7	0.86	NA	0
001.99	Ammoniacal N, Other (%)	0368	9.699	0.1310	11.12	0.2022	0.1181	22	-7.03	NA	0
001.99	Ammoniacal N, Other (%)	0394	10.69	0.2430	11.12	0.2022	0.1181	22	-2.10	NA	0
001.99	Ammoniacal N, Other (%)	0524	10.73	0.0100	11.12	0.2022	0.1181	22	-1.94	NA	0
001.99	Ammoniacal N, Other (%)	0220	10.86	0.0200	11.12	0.2022	0.1181	22	-1.29	NA	0
001.99	Ammoniacal N, Other (%)	0584	10.99	0.3100	11.12	0.2022	0.1181	22	-0.67	NA	0
001.99	Ammoniacal N, Other (%)	0513	11.07	0.0600	11.12	0.2022	0.1181	22	-0.25	NA	0
001.99	Ammoniacal N, Other (%)	0605	11.08	0.0300	11.12	0.2022	0.1181	22	-0.22	NA	0
001.99	Ammoniacal N, Other (%)	0559	11.10	0.0100	11.12	0.2022	0.1181	22	-0.12	NA	0
001.99	Ammoniacal N, Other (%)	0562	11.10	0.0100	11.12	0.2022	0.1181	22	-0.12	NA	0
001.99	Ammoniacal N, Other (%)	0564	11.10	0.0100	11.12	0.2022	0.1181	22	-0.12	NA	0
001.99	Ammoniacal N, Other (%)	0405	11.13	0.0300	11.12	0.2022	0.1181	22	0.03	NA	0
001.99	Ammoniacal N, Other (%)	0549	11.13	0.0500	11.12	0.2022	0.1181	22	0.03	NA	0
001.99	Ammoniacal N, Other (%)	0510	11.14	0.3022	11.12	0.2022	0.1181	22	0.09	NA	0
001.99	Ammoniacal N, Other (%)	0517	11.15	0.1000	11.12	0.2022	0.1181	22	0.15	NA	0
001.99	Ammoniacal N, Other (%)	0635	11.18	0.0600	11.12	0.2022	0.1181	22	0.30	NA	0
001.99	Ammoniacal N, Other (%)	0027	11.25	0.0400	11.12	0.2022	0.1181	22	0.64	NA	0
001.99	Ammoniacal N, Other (%)	0619	11.25	0.3000	11.12	0.2022	0.1181	22	0.64	NA	0
001.99	Ammoniacal N, Other (%)	0577	11.26	0.0800	11.12	0.2022	0.1181	22	0.69	NA	0
001.99	Ammoniacal N, Other (%)	0531	11.30	0.1800	11.12	0.2022	0.1181	22	0.89	NA	0
001.99	Ammoniacal N, Other (%)	0553	11.30	0.4400	11.12	0.2022	0.1181	22	0.89	NA	0
001.99	Ammoniacal N, Other (%)	0563	11.41	0.0600	11.12	0.2022	0.1181	22	1.44	NA	0
001.99	Ammoniacal N, Other (%)	0537	11.48	0.2500	11.12	0.2022	0.1181	22	1.76	NA	0
002.99	Nitrate N, Other (%)	0531	0.3850	0.0900				1			0
005.99	Urea N, Other (%)	0524	0.3100	0.0080				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				
005.99	Urea N, Other (%)	0638	11.52	0.2000				2			0
009.10	Ammoniacal Plus Nitrate N, Devarda (%)	0531	11.29	0.2400				2			0
009.10	Ammoniacal Plus Nitrate N, Devarda (%)	0444	11.35	0.1000				2			0
010.11	Total N, Modified Comprehensive (11%)	0510	11.13	0.3288				2			0
010.11	Total N, Modified Comprehensive (11%)	0531	11.30	0.1300				2			0
010.12	Total N, Salicylic (11%)	0498	10.65	0.1000				1			0
010.60	Total N, Combustion (11%)	0521	10.04	0.0000	11.19	0.2242	0.1050	49	-5.10	Low	0
010.60	Total N, Combustion (11%)	0402	10.83	0.0660	11.19	0.2242	0.1050	49	-1.57	OK	0
010.60	Total N, Combustion (11%)	0086	10.88	0.0480	11.19	0.2242	0.1050	49	-1.38	OK	0
010.60	Total N, Combustion (11%)	0029	10.89	0.1600	11.19	0.2242	0.1050	49	-1.32	OK	0
010.60	Total N, Combustion (11%)	0472	10.89	0.0600	11.19	0.2242	0.1050	49	-1.32	OK	0
010.60	Total N, Combustion (11%)	0177	10.90	0.0270	11.19	0.2242	0.1050	49	-1.28	OK	0
010.60	Total N, Combustion (11%)	0324	10.95	0.1000	11.19	0.2242	0.1050	49	-1.05	OK	0
010.60	Total N, Combustion (11%)	0351	10.96	0.0100	11.19	0.2242	0.1050	49	-1.03	OK	0
010.60	Total N, Combustion (11%)	0185	10.97	0.2000	11.19	0.2242	0.1050	49	-0.96	OK	0
010.60	Total N, Combustion (11%)	0234	10.99	0.1100	11.19	0.2242	0.1050	49	-0.89	OK	0
010.60	Total N, Combustion (11%)	0131	11.00	0.1040	11.19	0.2242	0.1050	49	-0.83	OK	0
010.60	Total N, Combustion (11%)	0102	11.02	0.0100	11.19	0.2242	0.1050	49	-0.76	OK	0
010.60	Total N, Combustion (11%)	0423	11.02	0.1200	11.19	0.2242	0.1050	49	-0.74	OK	0
010.60	Total N, Combustion (11%)	0389	11.03	0.0300	11.19	0.2242	0.1050	49	-0.72	OK	0
010.60	Total N, Combustion (11%)	0169	11.08	0.0500	11.19	0.2242	0.1050	49	-0.49	OK	0
010.60	Total N, Combustion (11%)	0291	11.08	0.0100	11.19	0.2242	0.1050	49	-0.49	OK	0
010.60	Total N, Combustion (11%)	0451	11.08	0.2600	11.19	0.2242	0.1050	49	-0.47	OK	0
010.60	Total N, Combustion (11%)	0422	11.13	0.0100	11.19	0.2242	0.1050	49	-0.27	OK	0
010.60	Total N, Combustion (11%)	0073	11.14	0.5000	11.19	0.2242	0.1050	49	-0.20	OK	0
010.60	Total N, Combustion (11%)	0035	11.15	0.1000	11.19	0.2242	0.1050	49	-0.16	OK	0
010.60	Total N, Combustion (11%)	0588	11.15	0.1000	11.19	0.2242	0.1050	49	-0.16	OK	0
010.60	Total N, Combustion (11%)	0220	11.16	0.0000	11.19	0.2242	0.1050	49	-0.11	OK	0
010.60	Total N, Combustion (11%)	0095	11.17	0.0700	11.19	0.2242	0.1050	49	-0.09	OK	0
010.60	Total N, Combustion (11%)	0523	11.17	0.0680	11.19	0.2242	0.1050	49	-0.07	OK	0
010.60	Total N, Combustion (11%)	0543	11.18	0.0000	11.19	0.2242	0.1050	49	-0.02	OK	0
010.60	Total N, Combustion (11%)	0527	11.21	0.3545	11.19	0.2242	0.1050	49	0.09	OK	0
010.60	Total N, Combustion (11%)	0027	11.23	0.1000	11.19	0.2242	0.1050	49	0.20	OK	0
010.60	Total N, Combustion (11%)	0356	11.23	0.2230	11.19	0.2242	0.1050	49	0.21	OK	0
010.60	Total N, Combustion (11%)	0231	11.24	0.0700	11.19	0.2242	0.1050	49	0.22	OK	0
010.60	Total N, Combustion (11%)	0405	11.24	0.0000	11.19	0.2242	0.1050	49	0.24	OK	0
010.60	Total N, Combustion (11%)	0307	11.25	0.1000	11.19	0.2242	0.1050	49	0.29	OK	0
010.60	Total N, Combustion (11%)	0354	11.25	0.1000	11.19	0.2242	0.1050	49	0.29	OK	0
010.60	Total N, Combustion (11%)	0260	11.28	0.0600	11.19	0.2242	0.1050	49	0.42	OK	0
010.60	Total N, Combustion (11%)	0043	11.29	0.0000	11.19	0.2242	0.1050	49	0.47	OK	0
010.60	Total N, Combustion (11%)	0612	11.30	0.0700	11.19	0.2242	0.1050	49	0.49	OK	0
010.60	Total N, Combustion (11%)	0230	11.30	0.0000	11.19	0.2242	0.1050	49	0.51	OK	0
010.60	Total N, Combustion (11%)	0037	11.34	0.2390	11.19	0.2242	0.1050	49	0.67	OK	0

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010.60	Total N, Combustion (11%)	0368	11.34	0.0090	11.19	0.2242	0.1050	49	0.67	OK	0
010.60	Total N, Combustion (11%)	0040	11.35	0.1000	11.19	0.2242	0.1050	49	0.73	OK	0
010.60	Total N, Combustion (11%)	0452	11.35	0.1000	11.19	0.2242	0.1050	49	0.73	OK	0
010.60	Total N, Combustion (11%)	0377	11.38	0.3500	11.19	0.2242	0.1050	49	0.84	OK	0
010.60	Total N, Combustion (11%)	0034	11.39	0.0000	11.19	0.2242	0.1050	49	0.91	OK	0
010.60	Total N, Combustion (11%)	0049	11.46	0.0200	11.19	0.2242	0.1050	49	1.22	OK	0
010.60	Total N, Combustion (11%)	0055	11.47	0.0850	11.19	0.2242	0.1050	49	1.26	OK	0
010.60	Total N, Combustion (11%)	0561	11.49	0.1000	11.19	0.2242	0.1050	49	1.36	OK	0
010.60	Total N, Combustion (11%)	0136	11.55	0.1000	11.19	0.2242	0.1050	49	1.63	OK	0
010.60	Total N, Combustion (11%)	0255	11.60	0.3470	11.19	0.2242	0.1050	49	1.84	OK	0
010.60	Total N, Combustion (11%)	0534	11.60	0.0000	11.19	0.2242	0.1050	49	1.85	OK	0
010.60	Total N, Combustion (11%)	0023	12.59	0.4290	11.19	0.2242	0.1050	49	6.28	High	0
010.60	Total N, Combustion (11%)	0106	10.34	0.8300	11.19	0.2242	0.1050	49	-3.79	Low	1
010.60	Total N, Combustion (11%)	0494	10.50	0.8000	11.19	0.2242	0.1050	49	-3.06	Low	1
010.99	Total N, Other (11%)	0524	10.98	0.0171	11.20	0.1961	0.0729	10	-1.04	OK	0
010.99	Total N, Other (11%)	0538	11.01	0.0500	11.20	0.1961	0.0729	10	-0.93	OK	0
010.99	Total N, Other (11%)	0605	11.08	0.0300	11.20	0.1961	0.0729	10	-0.60	OK	0
010.99	Total N, Other (11%)	0517	11.15	0.1000	11.20	0.1961	0.0729	10	-0.24	OK	0
010.99	Total N, Other (11%)	0559	11.17	0.0100	11.20	0.1961	0.0729	10	-0.17	OK	0
010.99	Total N, Other (11%)	0562	11.18	0.0100	11.20	0.1961	0.0729	10	-0.12	OK	0
010.99	Total N, Other (11%)	0564	11.18	0.0100	11.20	0.1961	0.0729	10	-0.12	OK	0
010.99	Total N, Other (11%)	0531	11.39	0.1000	11.20	0.1961	0.0729	10	0.89	OK	0
010.99	Total N, Other (11%)	0518	11.40	0.2000	11.20	0.1961	0.0729	10	0.94	OK	0
010.99	Total N, Other (11%)	0563	11.50	0.2200	11.20	0.1961	0.0729	10	1.42	OK	0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0157	34.50	0.2000	37.07	1.730	0.2200	4	-1.48		0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0095	37.65	0.3600	37.07	1.730	0.2200	4	0.34		0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0444	37.87	0.2200	37.07	1.730	0.2200	4	0.46		0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0619	38.25	0.1000	37.07	1.730	0.2200	4	0.68		0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0510	36.82	0.4798	37.37	0.3205	0.2549	10	-1.58	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0220	37.10	0.1100	37.37	0.3205	0.2549	10	-0.79	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0169	37.18	0.0500	37.37	0.3205	0.2549	10	-0.55	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0324	37.20	0.6000	37.37	0.3205	0.2549	10	-0.48	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0498	37.40	0.2000	37.37	0.3205	0.2549	10	0.10	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0356	37.42	0.3270	37.37	0.3205	0.2549	10	0.15	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0405	37.46	0.0700	37.37	0.3205	0.2549	10	0.26	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0231	37.54	0.0300	37.37	0.3205	0.2549	10	0.49	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0177	37.65	0.4276	37.37	0.3205	0.2549	10	0.81	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0561	37.98	0.0000	37.37	0.3205	0.2549	10	1.78	NA	0
020.40	Total P2O5, Automated (%)	0042	35.10	1.200				2			0
020.40	Total P2O5, Automated (%)	0035	38.25	0.5000				2			0
020.50	Total P2O5, ICP (%)	0433	29.36	0.1300	36.50	2.636	0.4534	19	-2.71	NA	0
020.50	Total P2O5, ICP (%)	0524	31.13	1.110	36.50	2.636	0.4534	19	-2.04	NA	0
020.50	Total P2O5, ICP (%)	0389	31.97	0.1200	36.50	2.636	0.4534	19	-1.72	NA	0

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020.50	Total P2O5, ICP (%)	0543	34.12	0.1600	36.50	2.636	0.4534	19	-0.90	NA	0
020.50	Total P2O5, ICP (%)	0612	34.33	3.360	36.50	2.636	0.4534	19	-0.82	NA	0
020.50	Total P2O5, ICP (%)	0255	35.80	0.2520	36.50	2.636	0.4534	19	-0.26	NA	0
020.50	Total P2O5, ICP (%)	0452	36.76	0.0600	36.50	2.636	0.4534	19	0.10	NA	0
020.50	Total P2O5, ICP (%)	0402	36.87	0.2350	36.50	2.636	0.4534	19	0.14	NA	0
020.50	Total P2O5, ICP (%)	0451	36.97	0.4300	36.50	2.636	0.4534	19	0.18	NA	0
020.50	Total P2O5, ICP (%)	0521	37.10	0.0000	36.50	2.636	0.4534	19	0.23	NA	0
020.50	Total P2O5, ICP (%)	0307	37.15	2.100	36.50	2.636	0.4534	19	0.25	NA	0
020.50	Total P2O5, ICP (%)	0234	37.28	0.0500	36.50	2.636	0.4534	19	0.30	NA	0
020.50	Total P2O5, ICP (%)	0472	37.32	0.6400	36.50	2.636	0.4534	19	0.31	NA	0
020.50	Total P2O5, ICP (%)	0527	37.35	0.1500	36.50	2.636	0.4534	19	0.32	NA	0
020.50	Total P2O5, ICP (%)	0356	37.52	0.0420	36.50	2.636	0.4534	19	0.39	NA	0
020.50	Total P2O5, ICP (%)	0368	38.03	0.1974	36.50	2.636	0.4534	19	0.58	NA	0
020.50	Total P2O5, ICP (%)	0588	38.85	0.5000	36.50	2.636	0.4534	19	0.89	NA	0
020.50	Total P2O5, ICP (%)	0422	39.92	0.5500	36.50	2.636	0.4534	19	1.30	NA	0
020.50	Total P2O5, ICP (%)	0523	41.10	2.800	36.50	2.636	0.4534	19	1.75	NA	0
020.99	Total P2O5, Other (%)	0562	36.73	0.0500	36.91	0.2874	0.0809	6	-0.58	NA	0
020.99	Total P2O5, Other (%)	0564	36.73	0.0500	36.91	0.2874	0.0809	6	-0.58	NA	0
020.99	Total P2O5, Other (%)	0577	36.79	0.2300	36.91	0.2874	0.0809	6	-0.39	NA	0
020.99	Total P2O5, Other (%)	0638	36.80	0.0900	36.91	0.2874	0.0809	6	-0.36	NA	0
020.99	Total P2O5, Other (%)	0513	37.10	0.0400	36.91	0.2874	0.0809	6	0.58	NA	0
020.99	Total P2O5, Other (%)	0619	38.25	0.1000	36.91	0.2874	0.0809	6	4.15	NA	0
020.99	Total P2O5, Other (%)	0515	53.20	1.330	36.91	0.2874	0.0809	6	50.47	NA	1
040.99	Indirect Available P2O5, Other (37%)	0405	37.46	0.0700				1			0
041.10	Direct Available P2O5, Gravimetric Quinolinium (37%)	0009	34.00	0.0000	37.42	1.004	0.1710	6	-3.03	Low	0
041.10	Direct Available P2O5, Gravimetric Quinolinium (37%)	0635	37.04	0.1800	37.42	1.004	0.1710	6	-0.33	OK	0
041.10	Direct Available P2O5, Gravimetric Quinolinium (37%)	0086	37.46	0.0149	37.42	1.004	0.1710	6	0.04	OK	0
041.10	Direct Available P2O5, Gravimetric Quinolinium (37%)	0040	37.75	0.1000	37.42	1.004	0.1710	6	0.30	OK	0
041.10	Direct Available P2O5, Gravimetric Quinolinium (37%)	0494	37.81	0.1200	37.42	1.004	0.1710	6	0.35	OK	0
041.10	Direct Available P2O5, Gravimetric Quinolinium (37%)	0102	38.53	0.4400	37.42	1.004	0.1710	6	0.99	High	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA I	0049	35.53	0.3000	37.40	0.7504	0.1023	7	-2.25	Low	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA I	0513	37.01	0.0700	37.40	0.7504	0.1023	7	-0.47	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA I	0517	37.10	0.2000	37.40	0.7504	0.1023	7	-0.36	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA I	0485	37.65	0.1000	37.40	0.7504	0.1023	7	0.31	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA I	0055	37.69	0.0350	37.40	0.7504	0.1023	7	0.35	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA I	0220	37.74	0.0300	37.40	0.7504	0.1023	7	0.41	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA I	0073	38.32	0.0200	37.40	0.7504	0.1023	7	1.11	High	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA I	0185	37.33	1.190	37.40	0.7504	0.1023	7	-0.08	OK	1
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (	0055	13.07	0.1950	33.40	7.000	0.5160	7	-2.63	Low	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (	0472	26.10	0.0000	33.40	7.000	0.5160	7	-0.94	Low	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (	0106	35.91	1.340	33.40	7.000	0.5160	7	0.32	High	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (	0354	36.85	0.3000	33.40	7.000	0.5160	7	0.45	High	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (0394	36.92	0.1310	33.40	7.000	0.5160	7	0.46	High	0

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041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (37%)	0230	37.45	1.100	33.40	7.000	0.5160	7	0.52	High	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (37%)	0231	37.65	0.0300	33.40	7.000	0.5160	7	0.55	High	0
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (37%)	0034	36.72	1.300				2			0
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (37%)	0029	36.89	0.9900				2			0
041.50	Direct Available P2O5, ICP (37%)	0037	37.07	0.4684	37.78	1.032	0.3161	3	-0.69		0
041.50	Direct Available P2O5, ICP (37%)	0131	37.31	0.2700	37.78	1.032	0.3161	3	-0.46		0
041.50	Direct Available P2O5, ICP (37%)	0605	38.97	0.2100	37.78	1.032	0.3161	3	1.15		0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (37%)	0423	36.94	0.0500	37.49	0.6334	0.3896	7	-0.79	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (37%)	0494	36.95	0.6200	37.49	0.6334	0.3896	7	-0.77	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (37%)	0025	37.15	0.9000	37.49	0.6334	0.3896	7	-0.49	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (37%)	0377	37.27	0.1700	37.49	0.6334	0.3896	7	-0.32	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (37%)	0136	37.70	0.6000	37.49	0.6334	0.3896	7	0.30	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (37%)	0043	38.17	0.1300	37.49	0.6334	0.3896	7	0.96	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (37%)	0023	38.27	0.2570	37.49	0.6334	0.3896	7	1.11	OK	0
041.99	Direct Available P2O5, Other (37%)	0584	31.79	0.7400	37.96	6.870	0.3800	6	-0.80	Low	0
041.99	Direct Available P2O5, Other (37%)	0518	31.85	0.7000	37.96	6.870	0.3800	6	-0.79	Low	0
041.99	Direct Available P2O5, Other (37%)	0559	36.65	0.1000	37.96	6.870	0.3800	6	-0.17	Low	0
041.99	Direct Available P2O5, Other (37%)	0538	37.02	0.0700	37.96	6.870	0.3800	6	-0.12	Low	0
041.99	Direct Available P2O5, Other (37%)	0531	45.14	0.3700	37.96	6.870	0.3800	6	0.93	High	0
041.99	Direct Available P2O5, Other (37%)	0537	45.31	0.3000	37.96	6.870	0.3800	6	0.95	High	0
042.10	Water Soluble OrthoP As P2O5, Spectrophotometric (%)	0220	11.44	0.0600				1			0
048.10	Water Soluble P2O5, Gravimetric Quinolinium (%)	0444	36.28	0.4500				2			0
048.10	Water Soluble P2O5, Gravimetric Quinolinium (%)	0619	38.00	0.4000				2			0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0394	11.69	0.2640				2			0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0472	14.96	0.0000				2			0
048.50	Water Soluble P2O5, ICP (%)	0444	36.26	0.3700				1			0
048.99	Water Soluble P2O5, Other (%)	0619	38.00	0.4000				1			0
050.50	Soluble K2O, ICP (Oxalate) (%)	0422	0.1425	0.0022				1			0
050.51	Soluble K2O, ICP (Citrate) (%)	0291	37.67	0.0200				1			0
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	0354	0.1615	0.0210				1			0
050.99	Soluble K2O, Other (%)	0524	0.1542	0.0214	0.1774	0.0262	0.0186	4	-0.88		0
050.99	Soluble K2O, Other (%)	0588	0.1700	0.0200	0.1774	0.0262	0.0186	4	-0.28		0
050.99	Soluble K2O, Other (%)	0527	0.1703	0.0031	0.1774	0.0262	0.0186	4	-0.27		0
050.99	Soluble K2O, Other (%)	0531	0.2150	0.0300	0.1774	0.0262	0.0186	4	1.44		0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0354	0.0550	0.0100				1			0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0472	0.0400	0.0000				1			0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0527	< 0.01					1			5
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0009	< 0.03					1			5
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0354	0.0800	0.0000				2			0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0035	0.1045	0.0090				2			0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0472	0.0500	0.0200	0.0726	0.0167	0.0090	4	-1.35		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0009	0.0700	0.0000	0.0726	0.0167	0.0090	4	-0.16		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0527	0.0836	0.0011	0.0726	0.0167	0.0090	4	0.65		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				
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0515	0.0869	0.0059	0.0726	0.0167	0.0090	4	0.85		0
121.99	Acid Soluble Mg, Other (%)	0524	0.0745	0.0027				2			0
121.99	Acid Soluble Mg, Other (%)	0515	0.0824	0.0184				2			0
145.99	Sulfate S, HCl soluble, Other (%)	0531	0.3950	0.1100				1			0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0472	0.5000	0.0000				2			0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0515	0.6969	0.1314				2			0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0527	< 0.1					2			5
148.99	Total S, Other (%)	0422	0.4443	0.0007				2			0
148.99	Total S, Other (%)	0354	0.5850	0.0100				2			0
149.04	S - HNO3 soluble, ICP (%)	0524	0.5157	0.0259				1			0
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid	0498	1.200	0.0000				1			0
151.30	Acid Soluble As, ICP (ppm)	0523	1.088	0.0280				2			0
151.30	Acid Soluble As, ICP (ppm)	0524	1.261	0.0305				2			0
151.30	Acid Soluble As, ICP (ppm)	0255	0.0000	0.0000				2			4
151.30	Acid Soluble As, ICP (ppm)	0605	< 6.2					2			5
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	0220	1.050	0.1000				2			0
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	0086	1.290	0.0000				2			0
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	0405	< 3					2			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0515	0.8025	0.2150	1.430	0.5367	0.1807	4	-1.17		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0136	1.200	0.0000	1.430	0.5367	0.1807	4	-0.43		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0563	1.700	0.0000	1.430	0.5367	0.1807	4	0.50		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0527	2.017	0.1463	1.430	0.5367	0.1807	4	1.09		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0009	< 5		1.430	0.5367	0.1807	4			5
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0515	2.223	0.7890				2			0
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0368	9.350	1.700				2			0
151.99	Acid Soluble As, Other (ppm)	0220	0.9500	0.1000				2			0
151.99	Acid Soluble As, Other (ppm)	0009	1.350	0.1000				2			0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0354	0.0100	0.0000				1			0
165.99	Acid Soluble B, Other (%)	0515	0.0047	0.0009	0.0096	0.0060	0.0005	5	-0.82		0
165.99	Acid Soluble B, Other (%)	0009	0.0075	0.0002	0.0096	0.0060	0.0005	5	-0.34		0
165.99	Acid Soluble B, Other (%)	0524	0.0078	0.0005	0.0096	0.0060	0.0005	5	-0.30		0
165.99	Acid Soluble B, Other (%)	0527	0.0079	0.0002	0.0096	0.0060	0.0005	5	-0.28		0
165.99	Acid Soluble B, Other (%)	0472	0.0200	0.0000	0.0096	0.0060	0.0005	5	1.74		0
181.30	Acid Soluble Cd, ICP (ppm)	0605	11.65	0.2400	13.36	0.6116	0.2183	6	-2.49	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0255	13.08	0.2000	13.36	0.6116	0.2183	6	-0.41	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0524	13.33	0.1259	13.36	0.6116	0.2183	6	-0.04	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0523	13.64	0.0130	13.36	0.6116	0.2183	6	0.40	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0035	13.75	0.5000	13.36	0.6116	0.2183	6	0.57	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0394	13.91	0.2450	13.36	0.6116	0.2183	6	0.80	NA	0
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	0220	13.15	0.1000				2			0
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	0405	15.00	0.0000				2			0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0009	13.00	0.0000	13.63	0.6199	0.3639	5	-1.02		0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0136	13.25	0.1000	13.63	0.6199	0.3639	5	-0.62		0

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			Value	Range	Rob Mean	Rob SD	Rob R-bar				
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0086	13.49	0.1800	13.63	0.6199	0.3639	5	-0.24		0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0515	13.84	1.130	13.63	0.6199	0.3639	5	0.32		0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0527	14.60	0.0457	13.63	0.6199	0.3639	5	1.55		0
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	0368	11.15	0.9000				2			0
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	0515	13.15	2.850				2			0
181.99	Acid Soluble Cd, Other (ppm)	0534	11.45	0.9100	13.03	1.531	0.6700	3	-1.04		0
181.99	Acid Soluble Cd, Other (ppm)	0220	13.15	0.1000	13.03	1.531	0.6700	3	0.08		0
181.99	Acid Soluble Cd, Other (ppm)	0009	14.50	1.000	13.03	1.531	0.6700	3	0.96		0
191.30	Acid Soluble Cr, ICP (ppm)	0605	164.4	3.760	184.1	14.22	4.239	5	-1.39		0
191.30	Acid Soluble Cr, ICP (ppm)	0035	174.0	4.000	184.1	14.22	4.239	5	-0.71		0
191.30	Acid Soluble Cr, ICP (ppm)	0523	190.6	1.074	184.1	14.22	4.239	5	0.45		0
191.30	Acid Soluble Cr, ICP (ppm)	0394	194.7	7.376	184.1	14.22	4.239	5	0.75		0
191.30	Acid Soluble Cr, ICP (ppm)	0524	197.0	4.987	184.1	14.22	4.239	5	0.90		0
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	0220	182.8	0.5000				2			0
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	0405	208.0	2.000				2			0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0527	189.0	0.7883	193.0	4.074	6.735	5	-0.98		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0009	190.0	0.0000	193.0	4.074	6.735	5	-0.74		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0136	191.4	7.000	193.0	4.074	6.735	5	-0.40		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0086	196.5	2.950	193.0	4.074	6.735	5	0.84		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0515	198.2	16.20	193.0	4.074	6.735	5	1.27		0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0368	170.0	20.00				2			0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0515	183.8	40.50				2			0
191.99	Acid Soluble Cr, Other (ppm)	0220	184.5	1.000				2			0
191.99	Acid Soluble Cr, Other (ppm)	0009	200.0	0.0000				2			0
202.00	Acid Soluble Co, AA, test portion 2006.03 modified w/dual acid	0498	< 2					0			5
202.30	Acid Soluble Co, ICP (ppm)	0523	0.0010	0.0000				2			0
202.30	Acid Soluble Co, ICP (ppm)	0524	1.186	0.0812				2			0
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0220	< 0.1					0			5
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0405	< 1					0			5
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0515	0.1296	0.0511				1			0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0527	< 0.0001					1			5
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0136	< 0.05					1			5
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0086	< 0.5					1			5
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0009	< 2					1			5
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0515	1.129	0.2120				1			0
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0368	< 0.1					1			5
202.99	Acid Soluble Co, Other (ppm)	0220	0.2000	0.0000				2			0
202.99	Acid Soluble Co, Other (ppm)	0255	3.419	1.115				2			0
202.99	Acid Soluble Co, Other (ppm)	0009	< 0.25					2			5
221.03	Acid Soluble Cu, AA, 965.09, test portion 2006.03A-C w/dual ac	0498	< 2					0			5
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0035	0.0004	0.0001				2			0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0402	0.0014	0.0006				2			0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0255	0.0000	0.0000				2			4

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221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0354	< 0.01					2			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 (%)	0515	0.0001	0.0000				1			0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0106	0.0000	0.0000				1			4
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0086	< 0.0001					1			5
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0527	< 0.0001					1			5
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0563	< 0.0001					1			5
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0136	< 0.0002					1			5
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0394	< 0.0002					1			5
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0009	< 0.0025					1			5
221.99	Acid Soluble Cu, Other (%)	0515	0.0002	0.0001				1			0
221.99	Acid Soluble Cu, Other (%)	0009	< 0.0008					1			5
221.99	Acid Soluble Cu, Other (%)	0368	< 0.3					1			5
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0402	0.4086	0.0046	0.4402	0.0274	0.0075	3	-1.15		0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0354	0.4550	0.0100	0.4402	0.0274	0.0075	3	0.54		0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0035	0.4570	0.0080	0.4402	0.0274	0.0075	3	0.61		0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0009	0.4150	0.0100	0.4398	0.0286	0.0165	4	-0.87		0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0527	0.4247	0.0064	0.4398	0.0286	0.0165	4	-0.53		0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0515	0.4394	0.0330	0.4398	0.0286	0.0165	4	-0.01		0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0472	0.4800	0.0000	0.4398	0.0286	0.0165	4	1.40		0
241.99	Acid Soluble Fe, Other (%)	0524	0.3676	0.0117				2			0
241.99	Acid Soluble Fe, Other (%)	0515	0.4031	0.0884				2			0
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid	0498	< 0.5					0			5
251.30	Acid Soluble Pb, ICP (ppm)	0523	0.0210	0.0000				1			0
251.30	Acid Soluble Pb, ICP (ppm)	0255	0.0000	0.0000				1			4
251.30	Acid Soluble Pb, ICP (ppm)	0394	< 0.4					1			5
251.30	Acid Soluble Pb, ICP (ppm)	0605	< 5					1			5
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	0220	0.2000	0.0000				1			0
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	0405	< 4					1			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0527	< 0.0001					0			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0515	< 0.21					0			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0086	< 1					0			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0136	< 3					0			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0009	< 6					0			5
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0368	1.250	0.1000				1			0
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0515	< 0.216					1			5
251.99	Acid Soluble Pb, Other (ppm)	0220	0.2000	0.0000				1			0
251.99	Acid Soluble Pb, Other (ppm)	0009	< 2.5					1			5
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0035	0.0064	0.0000				1			0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0354	< 0.01					1			5
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0009	0.0057	0.0001	0.0058	0.0001	0.0003	3	-1.12		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0527	0.0058	0.0000	0.0058	0.0001	0.0003	3	0.32		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0515	0.0059	0.0005	0.0058	0.0001	0.0003	3	0.80		0

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261.99	Acid Soluble Mn, Other (%)	0524	0.0050	0.0000				1			0
261.99	Acid Soluble Mn, Other (%)	0515	< 0.0011					1			5
281.00	Acid Soluble Hg, AA (ppm)	0498	< 0.5					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0527	< 0.001					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0563	< 0.02					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0515	< 0.1					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0009	< 0.5					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0605	< 1.24					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0405	< 2					0			5
281.99	Acid Soluble Hg, Other (ppm)	0524	0.0002	0.0002				2			0
281.99	Acid Soluble Hg, Other (ppm)	0220	0.0100	0.0000				2			0
281.99	Acid Soluble Hg, Other (ppm)	0086	< 0.14					2			5
289.30	Acid Soluble Mo, ICP (ppm)	0402	8.350	0.5000	8.716	0.3605	0.2504	4	-1.02		0
289.30	Acid Soluble Mo, ICP (ppm)	0255	8.475	0.0730	8.716	0.3605	0.2504	4	-0.67		0
289.30	Acid Soluble Mo, ICP (ppm)	0035	8.940	0.4200	8.716	0.3605	0.2504	4	0.62		0
289.30	Acid Soluble Mo, ICP (ppm)	0524	9.100	0.0086	8.716	0.3605	0.2504	4	1.06		0
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	0220	8.000	0.0000				2			0
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	0405	9.000	0.0000				2			0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0515	7.315	0.6550	8.647	1.032	0.3320	7	-1.17	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0563	8.000	0.2000	8.647	1.032	0.3320	7	-0.57	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0009	8.150	0.3000	8.647	1.032	0.3320	7	-0.44	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0136	8.600	0.2000	8.647	1.032	0.3320	7	-0.04	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0527	9.153	0.0068	8.647	1.032	0.3320	7	0.44	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0086	9.309	0.6300	8.647	1.032	0.3320	7	0.58	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0106	10.00	0.0000	8.647	1.032	0.3320	7	1.19	OK	0
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	0515	7.722	0.5990				2			0
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	0368	8.650	0.5000				2			0
289.99	Acid Soluble Mo, Other (ppm)	0220	8.000	0.2000				2			0
289.99	Acid Soluble Mo, Other (ppm)	0009	8.900	0.2000				2			0
291.30	Acid Soluble Ni, ICP (ppm)	0524	0.1524	0.0749				2			0
291.30	Acid Soluble Ni, ICP (ppm)	0523	0.1595	0.0030				2			0
291.30	Acid Soluble Ni, ICP (ppm)	0394	< 0.4					2			5
291.30	Acid Soluble Ni, ICP (ppm)	0605	< 2.4					2			5
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	0220	0.2500	0.1000				1			0
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	0405	< 1					1			5
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0527	< 0.0001					0			5
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0136	< 0.05					0			5
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0515	< 0.26					0			5
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0086	< 0.5					0			5
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0009	< 3					0			5
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0515	0.3585	0.1950				1			0
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0368	< 0.2					1			5
291.99	Acid Soluble Ni, Other (ppm)	0220	0.2000	0.0000				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				
291.99	Acid Soluble Ni, Other (ppm)	0255	13.87	20.41				2			0
291.99	Acid Soluble Ni, Other (ppm)	0009	< 2.5					2			5
301.30	Acid Soluble Se, ICP (ppm)	0524	0.0611	0.0008				2			0
301.30	Acid Soluble Se, ICP (ppm)	0523	0.2135	0.0130				2			0
301.30	Acid Soluble Se, ICP (ppm)	0605	< 1.65					2			5
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	0086	< 0.14					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
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0515	0.9445	0.0630				1			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0527	< 0.001					1			5
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0009	< 22					1			5
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0515	< 0.226					0			5
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0368	< 1.4					0			5
301.99	Acid Soluble Se, Other (ppm)	0255	0.0000	0.0000				0			4
301.99	Acid Soluble Se, Other (ppm)	0009	< 0.25					0			5
301.99	Acid Soluble Se, Other (ppm)	0220	< 0.3					0			5
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0009	0.0970	0.0000	0.1077	0.0122	0.0019	3	-0.87		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0527	0.1050	0.0017	0.1077	0.0122	0.0019	3	-0.22		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0035	0.1210	0.0020	0.1077	0.0122	0.0019	3	1.09		0
311.99	Sodium, Other (%)	0354	0.1550	0.0500				2			0
311.99	Sodium, Other (%)	0368	695.0	30.00				2			0
321.03	Acid Soluble Zn, AA, 965.09, test portion 2006.03A-C w/dual ac	0498	0.0270	0.0000				1			0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0354	0.0200	0.0000	0.0261	0.0044	0.0010	4	-1.36		0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0255	0.0260	0.0000	0.0261	0.0044	0.0010	4	-0.01		0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0402	0.0278	0.0009	0.0261	0.0044	0.0010	4	0.38		0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0035	0.0305	0.0010	0.0261	0.0044	0.0010	4	1.00		0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0220	0.0250	0.0002	0.0271	0.0026	0.0009	3	-0.83		0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0405	0.0264	0.0016	0.0271	0.0026	0.0009	3	-0.28		0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0095	0.0300	0.0000	0.0271	0.0026	0.0009	3	1.11		0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0009	0.0250	0.0000	0.0297	0.0079	0.0044	8	-0.55	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0136	0.0250	0.0100	0.0297	0.0079	0.0044	8	-0.55	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0106	0.0251	0.0006	0.0297	0.0079	0.0044	8	-0.54	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0394	0.0259	0.0007	0.0297	0.0079	0.0044	8	-0.45	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0527	0.0266	0.0002	0.0297	0.0079	0.0044	8	-0.36	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0086	0.0288	0.0067	0.0297	0.0079	0.0044	8	-0.11	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0472	0.0400	0.0000	0.0297	0.0079	0.0044	8	1.20	High	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0515	0.0427	0.0083	0.0297	0.0079	0.0044	8	1.50	High	0
321.99	Acid Soluble Zn, Other (%)	0515	0.0217	0.0019	41.52	92.79	5.001	5	-0.45		0
321.99	Acid Soluble Zn, Other (%)	0524	0.0243	0.0008	41.52	92.79	5.001	5	-0.45		0
321.99	Acid Soluble Zn, Other (%)	0220	0.0248	0.0001	41.52	92.79	5.001	5	-0.45		0
321.99	Acid Soluble Zn, Other (%)	0523	0.0300	0.0020	41.52	92.79	5.001	5	-0.45		0
321.99	Acid Soluble Zn, Other (%)	0368	207.5	25.00	41.52	92.79	5.001	5	1.79		0

Interpreting Z Scores and Flags:

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				

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 \pm 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