

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 191011

Grade 18-46-0 DAP

Statistical Summary

# Methods: 120

# Labs Reporting: 94

Issue Date : 11/30/2019

Method Code	Analyte & Method Sample # 191011	# 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 (%)	12	12	17.42	0.8344	17.51		0.7510	0.2710	4.29%		0.2348	2.60%
001.99	Ammoniacal N, Other (%)	28	28	17.97	0.3675	17.96		0.2046	0.0483	1.14%		0.1221	2.59%
002.99	Nitrate N, Other (%)	1		17.80									
010.11	Total N, Modified Comprehensive (18%)	5	5	18.02	0.1045	18.02	0.7003	0.1045	0.0584	0.58%	0.35	0.0842	2.59%
010.17	Total N, Comprehensive (18%)	1		17.68									
010.60	Total N, Combustion (18%)	63	61	17.94	0.2229	17.95	0.6993	0.2148	0.0344	1.20%	0.72	0.1062	2.59%
010.99	Total N, Other (18%)	10	10	17.95	0.4096	17.96	0.6994	0.4045	0.1599	2.25%	1.35	0.1520	2.59%
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	4	4	46.19	0.7184	46.19		0.7184	0.4490	1.56%		0.8175	2.25%
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	27	26	46.18	0.6741	46.21		0.6923	0.1697	1.50%		0.2106	2.25%
020.40	Total P2O5, Automated (%)	3	3	46.01	0.7062	46.01		0.7062	0.5096	1.53%		0.2767	2.25%
020.50	Total P2O5, ICP (%)	19	18	45.33	2.271	45.65		1.705	0.5022	3.73%		1.385	2.25%
020.99	Total P2O5, Other (%)	5	5	48.21	4.421	48.21		4.421	2.471	9.17%		0.1851	2.23%
030.20	Citrate Insoluble P2O5, Spectrophotometric MolybdovanadoP (%)	2	2	0.0350	0.0000								
030.40	Citrate Insoluble P2O5, Automated, test portion 963.03 A-B (%)	1		0.0350									
040.20	Indirect Available P2O5, Spectrophotometric (46%)	1		47.00									
040.40	Indirect Available P2O5, Automated (46%)	1		46.45									
040.99	Indirect Available P2O5, Other (46%)	1		46.35									
041.10	Direct Available P2O5, Gravimetric Quinolinium (46%)	6	6	46.17	0.6381	46.19	1.0028	0.6755	0.3447	1.46%	1.57	0.3895	2.25%
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (46%)	5	5	46.72	0.1604	46.72	1.0108	0.1604	0.0897	0.34%	0.37	0.0812	2.24%
041.20	Direct Available P2O5, Spectrophotometric (46%)	1		45.23									
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	13	13	45.96	0.7645	46.00	1.0000	0.7759	0.2690	1.69%	1.81	0.2092	2.25%
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (46%)	3	3	46.85	1.284	46.85	1.0128	1.284	0.9267	2.74%	2.95	0.6170	2.24%
041.50	Direct Available P2O5, ICP (46%)	6	6	44.75	3.662	45.91	0.9982	1.066	0.5439	2.32%	2.49	0.5030	2.25%
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	11	11	45.64	0.6027	45.64	0.9927	0.6834	0.2576	1.50%	1.60	0.5933	2.25%
041.99	Direct Available P2O5, Other (46%)	7	7	45.91	0.1879	45.91	0.9982	0.2130	0.1007	0.46%	0.50	0.0919	2.25%
042.99	Water Soluble OrthoP As P2O5, Other (%)	1		41.78									
048.10	Water Soluble P2O5, Gravimetric Quinolinium (%)	1		44.30									
048.20	Water Soluble P2O5, Spectrophotometric (%)	10	10	42.89	1.439	42.89		1.632	0.6450	3.80%		0.2495	2.27%
048.40	Water Soluble P2O5, Automated (%)	1		44.44									
048.50	Water Soluble P2O5, ICP (%)	4	4	42.68	2.957	42.68		2.957	1.848	6.93%		0.2940	2.27%
048.99	Water Soluble P2O5, Other (%)	4	4	42.48	0.8494	42.48		0.8494	0.5309	2.00%		0.7375	2.28%
050.30	Soluble K2O, AA (Oxalate) (%)	1		0.2000									
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	2	2	0.1228	0.0746								

Method Code	Analyte & Method Sample # 191011	# 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
050.99	Soluble K2O, Other (%)	9	8	0.5964	1.047	0.2822	0.4100	0.2427	0.1072	85.99%	1.38	0.0325	4.84%
060.00	Water (Free), Vacuum Oven (%)	4	4	0.8318	0.3324	0.8318		0.3324	0.2078	39.96%		0.0512	4.11%
060.99	Water (Free), Other (%)	1		1.214									
101.00	Acid Soluble Ca, AA, inorganic 965.09 (%)	1		0.0500									
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	6	6	0.3514	0.1435	0.3087	0.2154	0.0499	0.0255	16.17%	0.54	0.0362	4.77%
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	1		0.2615									
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	5	5	0.2576	0.0563	0.2576	0.2129	0.0563	0.0315	21.86%	0.62	0.0068	4.91%
101.99	Acid Soluble Ca, Other (%)	3	3	0.6440	0.6122	0.6440	0.2322	0.6122	0.4418	95.06%	6.14	0.0900	4.27%
121.00	Acid Soluble Mg, AA, inorganic 965.09 (%)	1		0.8850									
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	6	6	0.5842	0.2673	0.6646	0.2332	0.0908	0.0463	13.66%	0.91	0.0157	4.25%
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (%)	1		0.6370									
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	6	5	0.6429	0.0777	0.6429	0.2321	0.0777	0.0435	12.09%	0.78	0.0116	4.27%
121.99	Acid Soluble Mg, Other (%)	5	5	0.7652	0.2525	0.7652	0.2383	0.2525	0.1411	32.99%	2.47	0.0608	4.16%
143.99	Elemental S, Other (%)	3	3	2.247	0.0950	2.247		0.0950	0.0686	4.23%		0.0400	3.54%
148.07	Total S, ICP, test portion as in 2017.02 (%)	4	4	2.093	0.1991	2.093	0.3046	0.1991	0.1244	9.51%	1.52	0.1767	3.58%
148.99	Total S, Other (%)	4	4	2.308	0.1097	2.308	0.3154	0.1097	0.0686	4.76%	0.81	0.1400	3.53%
149.04	S - HNO3 soluble, ICP (%)	2	2	2.635	0.0353								
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid (ppm)	1		50.00									
151.30	Acid Soluble As, ICP (ppm)	5	4	2.087	1.332	2.087		1.332	0.8323	63.80%		0.6508	14.32%
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	4	3	1.689	0.6341	1.689		0.6341	0.4576	37.53%		0.0892	14.78%
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	1		0.0000									
151.99	Acid Soluble As, Other (ppm)	4	3	1.910	0.4666	1.910		0.4666	0.3367	24.43%		0.0400	14.51%
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	3	3	0.0501	0.0649	0.0501	0.0105	0.0649	0.0468	129.62%	14.39	0.0666	6.28%
165.99	Acid Soluble B, Other (%)	7	5	0.0093	0.0036	0.0093	0.0044	0.0036	0.0020	38.76%	1.91	0.0008	8.09%
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	2	2	34.96	2.179								
181.30	Acid Soluble Cd, ICP (ppm)	10	9	29.39	16.06	30.27		16.26	6.777	53.72%		0.9831	9.57%
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	6	6	37.76	4.089	37.76		4.637	2.366	12.28%		1.507	9.26%
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	1		33.50									
181.99	Acid Soluble Cd, Other (ppm)	4	4	36.22	9.252	36.22		9.252	5.783	25.55%		0.8400	9.32%
191.00	Acid Soluble Cr, AA, test portion 2006.03 modified w/dual acid (ppm)	2	2	202.6	11.39								
191.30	Acid Soluble Cr, ICP (ppm)	9	7	143.3	91.31	143.3		103.5	48.92	72.26%		1.539	7.58%
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	4	4	162.0	108.1	162.0		108.1	67.54	66.72%		4.799	7.44%
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	1		0.0199									
191.99	Acid Soluble Cr, Other (ppm)	4	4	208.7	52.71	208.7		52.71	32.94	25.25%		3.645	7.16%
202.30	Acid Soluble Co, ICP (ppm)	3	2	1.307	0.5941	1.307	1.3921	0.5941	0.5251	45.45%	0.99	0.0889	15.36%
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	5	3	1.156	0.7071	1.156	1.3468	0.7071	0.5103	61.17%	1.22	0.0288	15.65%
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	1		0.0000									
202.99	Acid Soluble Co, Other (ppm)	4	3	1.303	1.491	1.303	1.3909	1.491	1.076	114.41%	2.50	1.124	15.37%
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	1		0.0002									
221.03	Acid Soluble Cu, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	1		0.0002									
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	7	3	0.3100	0.2688	0.3100	0.0360	0.2688	0.1940	86.71%	17.40	0.3200	4.77%
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	4	1	0.0001		0.3100	0.0360	0.2688	0.3360	86.71%	17.40	0.0000	4.77%
221.99	Acid Soluble Cu, Other (%)	8	4	0.0080	0.0126	0.0080	0.0058	0.0126	0.0078	157.44%	5.05	0.0023	8.28%
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	8	7	0.4553	0.0187	0.4553	0.0505	0.0212	0.0100	4.66%	0.98	0.0181	4.50%

Method Code	Analyte & Method Sample # 191011	# 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
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (%)	1		0.4190									
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	6	6	0.4449	0.0114	0.4449	0.0495	0.0130	0.0066	2.91%	0.61	0.0075	4.52%
241.99	Acid Soluble Fe, Other (%)	4	4	0.4674	0.0640	0.4674	0.0517	0.0639	0.0400	13.68%	2.88	0.0263	4.48%
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	2	1	6.315									
251.30	Acid Soluble Pb, ICP (ppm)	5	4	1.227	1.271	1.227		1.271	0.7946	103.63%		1.019	15.51%
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	3	3	0.6865	0.6629	0.6865		0.6629	0.4784	96.56%		0.1012	16.93%
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	1		0.0000									
251.99	Acid Soluble Pb, Other (ppm)	4	2	0.5960	0.3592	0.5960		0.3592	0.3175	60.27%		0.0710	17.29%
261.00	Acid Soluble Mn, AA, Mn2+ only (%)	1		0.0095									
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	5	4	0.0110	0.0009	0.0110	0.0061	0.0009	0.0006	8.21%	0.35	0.0002	7.88%
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (%)	2	1	0.6100									
261.33	Acid Soluble Mn, ICP, test portion organic 965.09 (%)	1		0.0111									
261.34	Acid Soluble Mn, ICP, test portion 2006.03A-C (%)	1		0.0105									
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	4	3	0.0102	0.0013	0.0102	0.0060	0.0013	0.0009	12.36%	0.49	0.0002	7.98%
261.99	Acid Soluble Mn, Other (%)	4	4	0.0129	0.0123	0.0129	0.0063	0.0123	0.0077	95.54%	4.55	0.0052	7.70%
281.00	Acid Soluble Hg, AA (ppm)	2	0	0.0010									
281.30	Acid Soluble Hg, ICP (ppm)	3	0	0.0000		0.0129		0.0123		95.54%		0.0000	30.81%
281.99	Acid Soluble Hg, Other (ppm)	4	1	0.0142		0.0129		0.0123	0.0153	95.54%		0.0039	30.81%
289.00	Acid Soluble Mo, AA, test portion 2006.03 modified w/dual acid (ppm)	2	1	2.025									
289.30	Acid Soluble Mo, ICP (ppm)	7	5	6.432	7.668	6.432	2.9295	7.668	4.286	119.22%	6.10	0.3367	12.09%
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	5	5	2.967	2.637	2.967	1.8900	2.637	1.474	88.88%	3.25	0.1104	13.58%
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	1		0.3472									
289.99	Acid Soluble Mo, Other (ppm)	3	1	4.350		2.967	1.8900	2.637	3.296	88.88%	3.25	0.0400	13.58%
291.00	Acid Soluble Ni, AA, test portion 2006.03 modified w/dual acid (ppm)	2	2	11.92	8.524								
291.30	Acid Soluble Ni, ICP (ppm)	9	8	7.768	2.861	7.768		3.245	1.434	41.77%		0.5325	11.75%
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	3	3	8.239	3.018	8.239		3.018	2.178	36.63%		0.1700	11.65%
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	1		6.605									
291.99	Acid Soluble Ni, Other (ppm)	5	5	14.19	12.02	14.19		12.02	6.720	84.69%		2.123	10.73%
301.00	Acid Soluble Se, AA, test portion 2006.03 modified w/dual acid (ppm)	2	0	0.0800									
301.30	Acid Soluble Se, ICP (ppm)	2	1	1.975									
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	2	1	3.131									
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	1		0.0000									
301.99	Acid Soluble Se, Other (ppm)	4	1	6.285		14.19		12.02	15.03	84.69%		1.696	10.73%
311.33	Sodium, ICP, test portion as in 2017.02 (%)	4	4	0.1302	0.0562	0.1302	0.0180	0.0562	0.0351	43.13%	7.26	0.0102	5.44%
311.99	Sodium, Other (%)	3	3	0.1867	0.0379	0.1867	0.0237	0.0379	0.0273	20.28%	3.73	0.0067	5.15%
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	1		0.0285									
321.03	Acid Soluble Zn, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	1		0.0497									
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	13	12	0.0452	0.0038	0.0454	0.0095	0.0037	0.0013	8.24%	0.91	0.0027	6.37%
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	1		0.0565									
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	7	7	0.0452	0.0042	0.0452	0.0095	0.0048	0.0023	10.56%	1.17	0.0016	6.37%
321.99	Acid Soluble Zn, Other (%)	8	8	0.0422	0.0071	0.0426	0.0093	0.0072	0.0032	16.92%	1.81	0.0005	6.43%
325.00	Water Soluble Zn, AA (%)	1		0.0160									
325.30	Water Soluble Zn, ICP (%)	1		0.0475									

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

Method Code	Analyte & Method Sample # 191011	# 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
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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.

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 191011

### Method Precision Report

Grade 18-46-0 DAP

Issue Date : 11/30/2019

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility sR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
001.10	Ammoniacal N, Magnesium Oxide Method (%)	12	12	17.42	0.8344	0.8194	0.2228	0.8492	4.70%	1.28%	4.87%	3.811
001.99	Ammoniacal N, Other (%)	28	26	17.97	0.2755	0.2661	0.1009	0.2846	1.48%	0.56%	1.58%	2.821
010.60	Total N, Combustion (18%)	63	59	17.94	0.2240	0.2125	0.1000	0.2349	1.18%	0.56%	1.31%	2.348
010.99	Total N, Other (18%)	10	10	17.95	0.4096	0.3989	0.1311	0.4199	2.22%	0.73%	2.34%	3.204
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	27	25	46.18	0.6878	0.6787	0.1582	0.6969	1.47%	0.34%	1.51%	4.404
020.50	Total P2O5, ICP (%)	19	16	45.57	1.581	1.324	1.222	1.802	2.91%	2.68%	3.95%	1.474
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	13	12	45.96	0.7983	0.7912	0.1509	0.8054	1.72%	0.33%	1.75%	5.338
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	11	11	45.64	0.6027	0.4756	0.5235	0.7073	1.04%	1.15%	1.55%	1.351
048.20	Water Soluble P2O5, Spectrophotometric (%)	10	9	42.72	1.408	1.404	0.1541	1.413	3.29%	0.36%	3.31%	9.169
181.30	Acid Soluble Cd, ICP (ppm)	10	8	28.08	16.64	16.63	0.7179	16.65	59.25%	2.56%	59.30%	23.19
291.30	Acid Soluble Ni, ICP (ppm)	9	8	7.768	2.861	2.839	0.5030	2.883	36.55%	6.48%	37.12%	5.732
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	13	12	0.0451	0.0038	0.0031	0.0032	0.0044	6.84%	7.09%	9.85%	1.390
321.99	Acid Soluble Zn, Other (%)	8	8	0.0422	0.0071	0.0071	0.0006	0.0072	16.89%	1.47%	16.95%	11.52

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 # 191011  
Grade 18-46-0 DAP

Lab Values

# Methods: 120

# Labs Reporting: 94

Issue Date : 11/30/2019

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0230	15.80	0.2000	17.51	0.7510	0.2348	12	-2.28	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0389	15.92	0.1600	17.51	0.7510	0.2348	12	-2.12	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0231	17.05	0.3200	17.51	0.7510	0.2348	12	-0.61	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0451	17.26	0.6400	17.51	0.7510	0.2348	12	-0.34	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0526	17.49	0.0181	17.51	0.7510	0.2348	12	-0.03	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0456	17.55	0.3000	17.51	0.7510	0.2348	12	0.05	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0136	17.55	0.1000	17.51	0.7510	0.2348	12	0.05	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0444	17.71	0.0100	17.51	0.7510	0.2348	12	0.26	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0117	18.00	0.0000	17.51	0.7510	0.2348	12	0.65	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0309	18.04	0.2900	17.51	0.7510	0.2348	12	0.70	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0486	18.34	0.6400	17.51	0.7510	0.2348	12	1.10	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0481	18.39	0.1400	17.51	0.7510	0.2348	12	1.17	NA	0
001.99	Ammoniacal N, Other (%)	0394	16.93	0.2300	17.96	0.2046	0.1221	28	-5.05	NA	0
001.99	Ammoniacal N, Other (%)	0510	17.31	0.0299	17.96	0.2046	0.1221	28	-3.19	NA	0
001.99	Ammoniacal N, Other (%)	0546	17.53	0.2400	17.96	0.2046	0.1221	28	-2.12	NA	0
001.99	Ammoniacal N, Other (%)	0220	17.72	0.1000	17.96	0.2046	0.1221	28	-1.20	NA	0
001.99	Ammoniacal N, Other (%)	0476	17.83	0.2477	17.96	0.2046	0.1221	28	-0.65	NA	0
001.99	Ammoniacal N, Other (%)	0493	17.85	0.1000	17.96	0.2046	0.1221	28	-0.56	NA	0
001.99	Ammoniacal N, Other (%)	0527	17.85	0.1000	17.96	0.2046	0.1221	28	-0.56	NA	0
001.99	Ammoniacal N, Other (%)	0532	17.87	0.1400	17.96	0.2046	0.1221	28	-0.46	NA	0
001.99	Ammoniacal N, Other (%)	0029	17.89	0.1600	17.96	0.2046	0.1221	28	-0.36	NA	0
001.99	Ammoniacal N, Other (%)	0550	17.89	0.0400	17.96	0.2046	0.1221	28	-0.36	NA	0
001.99	Ammoniacal N, Other (%)	0553	17.90	0.2000	17.96	0.2046	0.1221	28	-0.32	NA	0
001.99	Ammoniacal N, Other (%)	0558	17.90	0.0000	17.96	0.2046	0.1221	28	-0.32	NA	0
001.99	Ammoniacal N, Other (%)	0538	17.92	0.0600	17.96	0.2046	0.1221	28	-0.22	NA	0
001.99	Ammoniacal N, Other (%)	0405	17.93	0.0200	17.96	0.2046	0.1221	28	-0.17	NA	0
001.99	Ammoniacal N, Other (%)	0560	17.98	0.0100	17.96	0.2046	0.1221	28	0.05	NA	0
001.99	Ammoniacal N, Other (%)	0537	17.98	0.2198	17.96	0.2046	0.1221	28	0.08	NA	0
001.99	Ammoniacal N, Other (%)	0096	17.99	0.0100	17.96	0.2046	0.1221	28	0.10	NA	0
001.99	Ammoniacal N, Other (%)	0520	18.02	0.3400	17.96	0.2046	0.1221	28	0.27	NA	0
001.99	Ammoniacal N, Other (%)	0559	18.03	0.0300	17.96	0.2046	0.1221	28	0.30	NA	0
001.99	Ammoniacal N, Other (%)	0549	18.04	0.1300	17.96	0.2046	0.1221	28	0.34	NA	0
001.99	Ammoniacal N, Other (%)	0506	18.05	0.3000	17.96	0.2046	0.1221	28	0.42	NA	0
001.99	Ammoniacal N, Other (%)	0522	18.08	0.0800	17.96	0.2046	0.1221	28	0.56	NA	0
001.99	Ammoniacal N, Other (%)	0513	18.10	0.0500	17.96	0.2046	0.1221	28	0.64	NA	0
001.99	Ammoniacal N, Other (%)	0545	18.15	0.0200	17.96	0.2046	0.1221	28	0.91	NA	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001.99	Ammoniacal N, Other (%)	0544	18.30	0.0600	17.96	0.2046	0.1221	28	1.64	NA	0
001.99	Ammoniacal N, Other (%)	0027	18.36	0.0300	17.96	0.2046	0.1221	28	1.91	NA	0
001.99	Ammoniacal N, Other (%)	0255	18.79	0.4200	17.96	0.2046	0.1221	28	4.03	NA	0
001.99	Ammoniacal N, Other (%)	0524	18.86	0.0526	17.96	0.2046	0.1221	28	4.37	NA	0
002.99	Nitrate N, Other (%)	0371	17.80	0.2000				1			0
010.11	Total N, Modified Comprehensive (18%)	0309	17.89	0.1300	18.02	0.1045	0.0842	5	-1.27		0
010.11	Total N, Modified Comprehensive (18%)	0105	17.96	0.1300	18.02	0.1045	0.0842	5	-0.60		0
010.11	Total N, Modified Comprehensive (18%)	0510	18.03	0.0409	18.02	0.1045	0.0842	5	0.10		0
010.11	Total N, Modified Comprehensive (18%)	0456	18.06	0.1200	18.02	0.1045	0.0842	5	0.41		0
010.11	Total N, Modified Comprehensive (18%)	0416	18.16	0.0000	18.02	0.1045	0.0842	5	1.36		0
010.17	Total N, Comprehensive (18%)	0526	17.68	0.0000				1			0
010.60	Total N, Combustion (18%)	0422	17.45	0.1000	17.95	0.2148	0.1062	61	-2.33	OK	0
010.60	Total N, Combustion (18%)	0450	17.45	0.1000	17.95	0.2148	0.1062	61	-2.33	OK	0
010.60	Total N, Combustion (18%)	0042	17.50	0.2800	17.95	0.2148	0.1062	61	-2.10	OK	0
010.60	Total N, Combustion (18%)	0356	17.52	0.2900	17.95	0.2148	0.1062	61	-2.03	OK	0
010.60	Total N, Combustion (18%)	0421	17.55	0.0400	17.95	0.2148	0.1062	61	-1.86	OK	0
010.60	Total N, Combustion (18%)	0525	17.60	0.2600	17.95	0.2148	0.1062	61	-1.63	OK	0
010.60	Total N, Combustion (18%)	0292	17.64	0.0700	17.95	0.2148	0.1062	61	-1.47	OK	0
010.60	Total N, Combustion (18%)	0117	17.65	0.1000	17.95	0.2148	0.1062	61	-1.40	OK	0
010.60	Total N, Combustion (18%)	0324	17.65	0.1000	17.95	0.2148	0.1062	61	-1.40	OK	0
010.60	Total N, Combustion (18%)	0230	17.70	0.2000	17.95	0.2148	0.1062	61	-1.17	OK	0
010.60	Total N, Combustion (18%)	0035	17.80	0.2000	17.95	0.2148	0.1062	61	-0.70	OK	0
010.60	Total N, Combustion (18%)	0027	17.80	0.4000	17.95	0.2148	0.1062	61	-0.70	OK	0
010.60	Total N, Combustion (18%)	0482	17.80	0.0000	17.95	0.2148	0.1062	61	-0.70	OK	0
010.60	Total N, Combustion (18%)	0255	17.80	0.4260	17.95	0.2148	0.1062	61	-0.69	OK	0
010.60	Total N, Combustion (18%)	0231	17.81	0.0300	17.95	0.2148	0.1062	61	-0.68	OK	0
010.60	Total N, Combustion (18%)	0055	17.81	0.0140	17.95	0.2148	0.1062	61	-0.65	OK	0
010.60	Total N, Combustion (18%)	0073	17.81	0.0200	17.95	0.2148	0.1062	61	-0.65	OK	0
010.60	Total N, Combustion (18%)	0390	17.84	0.0200	17.95	0.2148	0.1062	61	-0.51	OK	0
010.60	Total N, Combustion (18%)	0095	17.85	0.2300	17.95	0.2148	0.1062	61	-0.49	OK	0
010.60	Total N, Combustion (18%)	0527	17.85	0.0130	17.95	0.2148	0.1062	61	-0.48	OK	0
010.60	Total N, Combustion (18%)	0389	17.86	0.0100	17.95	0.2148	0.1062	61	-0.44	OK	0
010.60	Total N, Combustion (18%)	0233	17.88	0.0300	17.95	0.2148	0.1062	61	-0.35	OK	0
010.60	Total N, Combustion (18%)	0360	17.89	0.0300	17.95	0.2148	0.1062	61	-0.30	OK	0
010.60	Total N, Combustion (18%)	0451	17.91	0.3700	17.95	0.2148	0.1062	61	-0.21	OK	0
010.60	Total N, Combustion (18%)	0177	17.92	0.1300	17.95	0.2148	0.1062	61	-0.16	OK	0
010.60	Total N, Combustion (18%)	0472	17.92	0.0500	17.95	0.2148	0.1062	61	-0.16	OK	0
010.60	Total N, Combustion (18%)	0086	17.93	0.1250	17.95	0.2148	0.1062	61	-0.08	OK	0
010.60	Total N, Combustion (18%)	0481	17.97	0.0500	17.95	0.2148	0.1062	61	0.07	OK	0
010.60	Total N, Combustion (18%)	0096	17.98	0.0400	17.95	0.2148	0.1062	61	0.14	OK	0
010.60	Total N, Combustion (18%)	0452	17.98	0.0000	17.95	0.2148	0.1062	61	0.14	OK	0
010.60	Total N, Combustion (18%)	0043	17.99	0.0300	17.95	0.2148	0.1062	61	0.16	OK	0
010.60	Total N, Combustion (18%)	0106	17.99	0.0900	17.95	0.2148	0.1062	61	0.16	OK	0
010.60	Total N, Combustion (18%)	0485	17.99	0.0370	17.95	0.2148	0.1062	61	0.18	OK	0
010.60	Total N, Combustion (18%)	0494	18.00	0.0100	17.95	0.2148	0.1062	61	0.21	OK	0
010.60	Total N, Combustion (18%)	0040	18.00	0.2000	17.95	0.2148	0.1062	61	0.23	OK	0
010.60	Total N, Combustion (18%)	0234	18.00	0.0000	17.95	0.2148	0.1062	61	0.23	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total N, Combustion (18%)	0034	18.03	0.0100	17.95	0.2148	0.1062	61	0.35	OK	0
010.60	Total N, Combustion (18%)	0041	18.04	0.0000	17.95	0.2148	0.1062	61	0.42	OK	0
010.60	Total N, Combustion (18%)	0486	18.04	0.0400	17.95	0.2148	0.1062	61	0.42	OK	0
010.60	Total N, Combustion (18%)	0291	18.05	0.0100	17.95	0.2148	0.1062	61	0.44	OK	0
010.60	Total N, Combustion (18%)	0547	18.05	0.0600	17.95	0.2148	0.1062	61	0.46	OK	0
010.60	Total N, Combustion (18%)	0405	18.05	0.0400	17.95	0.2148	0.1062	61	0.46	OK	0
010.60	Total N, Combustion (18%)	0114	18.06	0.3500	17.95	0.2148	0.1062	61	0.49	OK	0
010.60	Total N, Combustion (18%)	0169	18.08	0.1500	17.95	0.2148	0.1062	61	0.58	OK	0
010.60	Total N, Combustion (18%)	0444	18.09	0.2200	17.95	0.2148	0.1062	61	0.65	OK	0
010.60	Total N, Combustion (18%)	0136	18.10	0.2000	17.95	0.2148	0.1062	61	0.70	OK	0
010.60	Total N, Combustion (18%)	0354	18.10	0.0000	17.95	0.2148	0.1062	61	0.70	OK	0
010.60	Total N, Combustion (18%)	0561	18.10	0.0200	17.95	0.2148	0.1062	61	0.70	OK	0
010.60	Total N, Combustion (18%)	0029	18.11	0.2600	17.95	0.2148	0.1062	61	0.74	OK	0
010.60	Total N, Combustion (18%)	0555	18.11	0.0600	17.95	0.2148	0.1062	61	0.74	OK	0
010.60	Total N, Combustion (18%)	0220	18.12	0.0600	17.95	0.2148	0.1062	61	0.79	OK	0
010.60	Total N, Combustion (18%)	0402	18.14	0.0160	17.95	0.2148	0.1062	61	0.87	OK	0
010.60	Total N, Combustion (18%)	0025	18.14	0.0600	17.95	0.2148	0.1062	61	0.88	OK	0
010.60	Total N, Combustion (18%)	0377	18.15	0.0100	17.95	0.2148	0.1062	61	0.91	OK	0
010.60	Total N, Combustion (18%)	0105	18.17	0.4290	17.95	0.2148	0.1062	61	1.03	OK	0
010.60	Total N, Combustion (18%)	0131	18.20	0.2110	17.95	0.2148	0.1062	61	1.15	OK	0
010.60	Total N, Combustion (18%)	0023	18.25	0.1000	17.95	0.2148	0.1062	61	1.40	OK	0
010.60	Total N, Combustion (18%)	0550	18.28	0.0000	17.95	0.2148	0.1062	61	1.54	OK	0
010.60	Total N, Combustion (18%)	0516	18.30	0.0000	17.95	0.2148	0.1062	61	1.63	OK	0
010.60	Total N, Combustion (18%)	0534	18.40	0.0000	17.95	0.2148	0.1062	61	2.09	OK	0
010.60	Total N, Combustion (18%)	0423	18.46	0.0800	17.95	0.2148	0.1062	61	2.37	OK	0
010.60	Total N, Combustion (18%)	0325	18.15	0.9000	17.95	0.2148	0.1062	61	0.93	OK	1
010.60	Total N, Combustion (18%)	0102	20.05	0.3000	17.95	0.2148	0.1062	61	9.78	High	2
010.99	Total N, Other (18%)	0524	17.20	0.1681	17.96	0.4045	0.1520	10	-1.73	Low	0
010.99	Total N, Other (18%)	0394	17.50	0.1120	17.96	0.4045	0.1520	10	-1.05	OK	0
010.99	Total N, Other (18%)	0533	17.82	0.1500	17.96	0.4045	0.1520	10	-0.33	OK	0
010.99	Total N, Other (18%)	0553	17.90	0.2000	17.96	0.4045	0.1520	10	-0.13	OK	0
010.99	Total N, Other (18%)	0558	17.90	0.0000	17.96	0.4045	0.1520	10	-0.13	OK	0
010.99	Total N, Other (18%)	0560	18.01	0.0300	17.96	0.4045	0.1520	10	0.11	OK	0
010.99	Total N, Other (18%)	0506	18.05	0.3000	17.96	0.4045	0.1520	10	0.21	OK	0
010.99	Total N, Other (18%)	0559	18.19	0.0200	17.96	0.4045	0.1520	10	0.54	OK	0
010.99	Total N, Other (18%)	0520	18.30	0.3100	17.96	0.4045	0.1520	10	0.78	OK	0
010.99	Total N, Other (18%)	0481	18.69	0.2300	17.96	0.4045	0.1520	10	1.67	High	0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0136	45.20	2.400	46.19	0.7184	0.8175	4	-1.38		0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0114	46.14	0.2500	46.19	0.7184	0.8175	4	-0.07		0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0493	46.60	0.1000	46.19	0.7184	0.8175	4	0.57		0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0444	46.82	0.5200	46.19	0.7184	0.8175	4	0.88		0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0027	44.76	0.4100	46.21	0.6923	0.2106	26	-2.10	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0230	44.85	0.3000	46.21	0.6923	0.2106	26	-1.96	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0526	45.11	0.1166	46.21	0.6923	0.2106	26	-1.59	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0476	45.11	0.1885	46.21	0.6923	0.2106	26	-1.59	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0550	45.31	0.0600	46.21	0.6923	0.2106	26	-1.30	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0292	45.60	0.0200	46.21	0.6923	0.2106	26	-0.88	NA	0



Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0481	45.84	0.2500	46.21	0.6923	0.2106	26	-0.54	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0309	45.97	0.1400	46.21	0.6923	0.2106	26	-0.35	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0558	46.00	0.2000	46.21	0.6923	0.2106	26	-0.30	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0553	46.10	1.200	46.21	0.6923	0.2106	26	-0.16	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0506	46.15	0.1000	46.21	0.6923	0.2106	26	-0.09	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0169	46.38	0.1100	46.21	0.6923	0.2106	26	0.24	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0405	46.39	0.0500	46.21	0.6923	0.2106	26	0.25	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0394	46.47	0.2980	46.21	0.6923	0.2106	26	0.37	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0522	46.49	0.2200	46.21	0.6923	0.2106	26	0.41	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0493	46.52	0.1200	46.21	0.6923	0.2106	26	0.45	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0231	46.52	0.0000	46.21	0.6923	0.2106	26	0.45	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0416	46.55	0.0300	46.21	0.6923	0.2106	26	0.48	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0561	46.58	0.0300	46.21	0.6923	0.2106	26	0.53	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0534	46.70	0.0000	46.21	0.6923	0.2106	26	0.71	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0450	46.74	0.5300	46.21	0.6923	0.2106	26	0.76	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0510	46.80	0.2025	46.21	0.6923	0.2106	26	0.85	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0371	46.80	0.2000	46.21	0.6923	0.2106	26	0.85	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0356	46.85	0.4800	46.21	0.6923	0.2106	26	0.93	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0544	47.00	0.0000	46.21	0.6923	0.2106	26	1.14	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0220	47.03	0.2200	46.21	0.6923	0.2106	26	1.19	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0324	46.75	2.100	46.21	0.6923	0.2106	26	0.78	NA	1
020.40	Total P2O5, Automated (%)	0035	45.20	0.7200	46.01	0.7062	0.2767	3	-1.15		0
020.40	Total P2O5, Automated (%)	0456	46.35	0.1000	46.01	0.7062	0.2767	3	0.48		0
020.40	Total P2O5, Automated (%)	0096	46.49	0.0100	46.01	0.7062	0.2767	3	0.67		0
020.50	Total P2O5, ICP (%)	0451	38.82	0.5000	45.65	1.705	1.385	18	-4.01	NA	0
020.50	Total P2O5, ICP (%)	0389	41.46	0.1800	45.65	1.705	1.385	18	-2.46	NA	0
020.50	Total P2O5, ICP (%)	0390	43.74	1.170	45.65	1.705	1.385	18	-1.13	NA	0
020.50	Total P2O5, ICP (%)	0472	43.78	0.0400	45.65	1.705	1.385	18	-1.10	NA	0
020.50	Total P2O5, ICP (%)	0525	44.75	0.1500	45.65	1.705	1.385	18	-0.53	NA	0
020.50	Total P2O5, ICP (%)	0552	44.91	3.030	45.65	1.705	1.385	18	-0.44	NA	0
020.50	Total P2O5, ICP (%)	0444	45.55	0.6200	45.65	1.705	1.385	18	-0.06	NA	0
020.50	Total P2O5, ICP (%)	0433	45.63	0.1900	45.65	1.705	1.385	18	-0.02	NA	0
020.50	Total P2O5, ICP (%)	0527	45.91	0.0697	45.65	1.705	1.385	18	0.15	NA	0
020.50	Total P2O5, ICP (%)	0555	45.92	0.2500	45.65	1.705	1.385	18	0.15	NA	0
020.50	Total P2O5, ICP (%)	0402	45.99	3.460	45.65	1.705	1.385	18	0.20	NA	0
020.50	Total P2O5, ICP (%)	0486	46.29	0.5300	45.65	1.705	1.385	18	0.37	NA	0
020.50	Total P2O5, ICP (%)	0234	46.50	1.000	45.65	1.705	1.385	18	0.50	NA	0
020.50	Total P2O5, ICP (%)	0547	46.70	0.2000	45.65	1.705	1.385	18	0.61	NA	0
020.50	Total P2O5, ICP (%)	0255	46.92	1.832	45.65	1.705	1.385	18	0.74	NA	0
020.50	Total P2O5, ICP (%)	0516	47.10	2.200	45.65	1.705	1.385	18	0.85	NA	0
020.50	Total P2O5, ICP (%)	0482	47.95	3.900	45.65	1.705	1.385	18	1.35	NA	0
020.50	Total P2O5, ICP (%)	0422	47.96	5.600	45.65	1.705	1.385	18	1.35	NA	0
020.50	Total P2O5, ICP (%)	0524	55.22	9.301	45.65	1.705	1.385	18	5.61	NA	1
020.99	Total P2O5, Other (%)	0559	45.74	0.0200	48.21	4.421	0.1851	5	-0.56		0
020.99	Total P2O5, Other (%)	0560	46.01	0.0500	48.21	4.421	0.1851	5	-0.50		0
020.99	Total P2O5, Other (%)	0520	46.43	0.6000	48.21	4.421	0.1851	5	-0.40		0
020.99	Total P2O5, Other (%)	0513	46.77	0.1000	48.21	4.421	0.1851	5	-0.32		0

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			Value	Range	Rob Mean	Rob SD	R-bar				
020.99	Total P2O5, Other (%)	0515	56.08	0.1553	48.21	4.421	0.1851	5	1.78		0
030.20	Citrate Insoluble P2O5, Spectrophotometric MolybdovanadoP (%)	0220	0.0350	0.0100				2			0
030.20	Citrate Insoluble P2O5, Spectrophotometric MolybdovanadoP (%)	0405	0.0350	0.0100				2			0
030.40	Citrate Insoluble P2O5, Automated, test portion 963.03 A-B (%)	0096	0.0350	0.0100				1			0
040.20	Indirect Available P2O5, Spectrophotometric (46%)	0220	47.00	0.2100				1			0
040.40	Indirect Available P2O5, Automated (46%)	0096	46.45	0.0000				1			0
040.99	Indirect Available P2O5, Other (46%)	0405	46.35	0.0400				1			0
041.10	Direct Available P2O5, Gravimetric Quinolinium (46%)	0041	45.05	0.9000	46.19	0.6755	0.3895	6	-1.50	Low	0
041.10	Direct Available P2O5, Gravimetric Quinolinium (46%)	0102	45.80	0.6000	46.19	0.6755	0.3895	6	-0.51	OK	0
041.10	Direct Available P2O5, Gravimetric Quinolinium (46%)	0049	46.34	0.1700	46.19	0.6755	0.3895	6	0.20	OK	0
041.10	Direct Available P2O5, Gravimetric Quinolinium (46%)	0177	46.43	0.0141	46.19	0.6755	0.3895	6	0.32	OK	0
041.10	Direct Available P2O5, Gravimetric Quinolinium (46%)	0086	46.63	0.1629	46.19	0.6755	0.3895	6	0.58	OK	0
041.10	Direct Available P2O5, Gravimetric Quinolinium (46%)	0494	46.76	0.4900	46.19	0.6755	0.3895	6	0.75	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (46%)	0055	46.56	0.2400	46.72	0.1604	0.0812	5	-1.02		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (46%)	0073	46.62	0.0100	46.72	0.1604	0.0812	5	-0.67		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (46%)	0513	46.71	0.1200	46.72	0.1604	0.0812	5	-0.08		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (46%)	0485	46.76	0.0262	46.72	0.1604	0.0812	5	0.20		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (46%)	0220	46.98	0.0100	46.72	0.1604	0.0812	5	1.57		0
041.20	Direct Available P2O5, Spectrophotometric (46%)	0027	45.23	0.0400				1			0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0526	44.53	0.0000	46.00	0.7759	0.2092	13	-1.89	Low	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0230	44.60	0.2000	46.00	0.7759	0.2092	13	-1.81	Low	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0472	45.32	0.0000	46.00	0.7759	0.2092	13	-0.88	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0544	45.50	0.2000	46.00	0.7759	0.2092	13	-0.65	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0354	46.00	0.2000	46.00	0.7759	0.2092	13	0.00	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0106	46.01	0.7300	46.00	0.7759	0.2092	13	0.00	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0522	46.14	0.2500	46.00	0.7759	0.2092	13	0.17	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0231	46.26	0.0400	46.00	0.7759	0.2092	13	0.33	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0394	46.36	0.0950	46.00	0.7759	0.2092	13	0.46	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0405	46.55	0.3000	46.00	0.7759	0.2092	13	0.71	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0177	46.64	0.1741	46.00	0.7759	0.2092	13	0.82	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0105	46.68	0.0500	46.00	0.7759	0.2092	13	0.87	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (46%)	0055	46.91	0.4800	46.00	0.7759	0.2092	13	1.17	OK	0
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (46%)	0095	45.56	0.4700	46.85	1.284	0.6170	3	-1.01		0
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (46%)	0029	46.88	1.240	46.85	1.284	0.6170	3	0.02		0
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (46%)	0034	48.12	0.1410	46.85	1.284	0.6170	3	0.99		0
041.50	Direct Available P2O5, ICP (46%)	0325	37.35	1.700	45.91	1.066	0.5030	6	-7.15	Low	0
041.50	Direct Available P2O5, ICP (46%)	0421	45.50	0.2000	45.91	1.066	0.5030	6	-0.34	OK	0
041.50	Direct Available P2O5, ICP (46%)	0131	46.03	0.6580	45.91	1.066	0.5030	6	0.10	OK	0
041.50	Direct Available P2O5, ICP (46%)	0291	46.17	0.0100	45.91	1.066	0.5030	6	0.21	OK	0
041.50	Direct Available P2O5, ICP (46%)	0452	46.36	0.0500	45.91	1.066	0.5030	6	0.37	OK	0
041.50	Direct Available P2O5, ICP (46%)	0007	47.10	0.4000	45.91	1.066	0.5030	6	0.99	High	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0136	44.75	1.500	45.64	0.6834	0.5933	11	-1.21	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0423	44.87	0.8300	45.64	0.6834	0.5933	11	-1.05	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0117	45.00	0.7359	45.64	0.6834	0.5933	11	-0.88	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0377	45.23	0.3100	45.64	0.6834	0.5933	11	-0.56	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0025	45.60	0.2000	45.64	0.6834	0.5933	11	-0.05	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0043	45.67	0.4900	45.64	0.6834	0.5933	11	0.04	OK	0

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041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0040	45.85	0.5000	45.64	0.6834	0.5933	11	0.29	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0360	46.09	0.3000	45.64	0.6834	0.5933	11	0.62	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0494	46.22	1.330	45.64	0.6834	0.5933	11	0.79	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0486	46.29	0.2300	45.64	0.6834	0.5933	11	0.89	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (46%)	0023	46.45	0.1000	45.64	0.6834	0.5933	11	1.12	OK	0
041.99	Direct Available P2O5, Other (46%)	0533	45.65	0.1500	45.91	0.2130	0.0919	7	-1.12	OK	0
041.99	Direct Available P2O5, Other (46%)	0532	45.69	0.1700	45.91	0.2130	0.0919	7	-0.95	OK	0
041.99	Direct Available P2O5, Other (46%)	0538	45.88	0.1600	45.91	0.2130	0.0919	7	-0.12	OK	0
041.99	Direct Available P2O5, Other (46%)	0537	45.98	0.0431	45.91	0.2130	0.0919	7	0.29	OK	0
041.99	Direct Available P2O5, Other (46%)	0549	45.99	0.0200	45.91	0.2130	0.0919	7	0.35	OK	0
041.99	Direct Available P2O5, Other (46%)	0560	46.01	0.0500	45.91	0.2130	0.0919	7	0.41	OK	0
041.99	Direct Available P2O5, Other (46%)	0545	46.18	0.0500	45.91	0.2130	0.0919	7	1.13	OK	0
042.99	Water Soluble OrthoP As P2O5, Other (%)	0520	41.78	0.2900				1			0
048.10	Water Soluble P2O5, Gravimetric Quinolinium (%)	0444	44.30	0.0000				1			0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0476	40.94	0.3698	42.89	1.632	0.2495	10	-1.11	NA	0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0550	41.02	0.1000	42.89	1.632	0.2495	10	-1.07	NA	0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0558	41.85	0.3000	42.89	1.632	0.2495	10	-0.59	NA	0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0526	41.90	0.0262	42.89	1.632	0.2495	10	-0.56	NA	0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0309	42.45	0.2400	42.89	1.632	0.2495	10	-0.25	NA	0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0394	43.23	0.2790	42.89	1.632	0.2495	10	0.19	NA	0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0405	44.25	0.1200	42.89	1.632	0.2495	10	0.77	NA	0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0561	44.27	0.1600	42.89	1.632	0.2495	10	0.79	NA	0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0220	44.47	0.7800	42.89	1.632	0.2495	10	0.90	NA	0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0231	44.54	0.1200	42.89	1.632	0.2495	10	0.94	NA	0
048.40	Water Soluble P2O5, Automated (%)	0096	44.44	0.0000				1			0
048.50	Water Soluble P2O5, ICP (%)	0389	38.27	0.4300	42.68	2.957	0.2940	4	-1.49		0
048.50	Water Soluble P2O5, ICP (%)	0444	43.95	0.0100	42.68	2.957	0.2940	4	0.43		0
048.50	Water Soluble P2O5, ICP (%)	0234	44.00	0.0000	42.68	2.957	0.2940	4	0.45		0
048.50	Water Soluble P2O5, ICP (%)	0546	44.52	0.7360	42.68	2.957	0.2940	4	0.62		0
048.99	Water Soluble P2O5, Other (%)	0506	41.90	2.800	42.48	0.8494	0.7375	4	-0.68		0
048.99	Water Soluble P2O5, Other (%)	0560	42.03	0.0100	42.48	0.8494	0.7375	4	-0.54		0
048.99	Water Soluble P2O5, Other (%)	0559	42.27	0.0300	42.48	0.8494	0.7375	4	-0.25		0
048.99	Water Soluble P2O5, Other (%)	0513	43.74	0.1100	42.48	0.8494	0.7375	4	1.48		0
050.30	Soluble K2O, AA (Oxalate) (%)	0136	0.2000	0.0000				1			0
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	0494	0.0700	0.0000				2			0
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	0354	0.1755	0.0050				2			0
050.99	Soluble K2O, Other (%)	0325	0.1500	0.1000	0.2822	0.2427	0.0325	8	-0.50	OK	0
050.99	Soluble K2O, Other (%)	0096	0.1600	0.0000	0.2822	0.2427	0.0325	8	-0.46	OK	0
050.99	Soluble K2O, Other (%)	0389	0.1600	0.0000	0.2822	0.2427	0.0325	8	-0.46	OK	0
050.99	Soluble K2O, Other (%)	0482	0.1700	0.0200	0.2822	0.2427	0.0325	8	-0.42	OK	0
050.99	Soluble K2O, Other (%)	0527	0.1755	0.0038	0.2822	0.2427	0.0325	8	-0.40	OK	0
050.99	Soluble K2O, Other (%)	0524	0.1860	0.0159	0.2822	0.2427	0.0325	8	-0.36	OK	0
050.99	Soluble K2O, Other (%)	0516	0.6100	0.0800	0.2822	0.2427	0.0325	8	1.24	OK	0
050.99	Soluble K2O, Other (%)	0552	3.160	0.0400	0.2822	0.2427	0.0325	8	10.85	High	0
050.99	Soluble K2O, Other (%)	0402	0.0000	0.0000	0.2822	0.2427	0.0325	8			4
060.00	Water (Free), Vacuum Oven (%)	0513	0.4300	0.0200	0.8318	0.3324	0.0512	4	-1.21		0
060.00	Water (Free), Vacuum Oven (%)	0416	0.7021	0.0147	0.8318	0.3324	0.0512	4	-0.39		0

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060.00	Water (Free), Vacuum Oven (%)	0456	1.020	0.0400	0.8318	0.3324	0.0512	4	0.57		0
060.00	Water (Free), Vacuum Oven (%)	0096	1.175	0.1300	0.8318	0.3324	0.0512	4	1.03		0
060.99	Water (Free), Other (%)	0510	1.214	0.0058				1			0
101.00	Acid Soluble Ca, AA, inorganic 965.09 (%)	0553	0.0500	0.0080				1			0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0472	0.2550	0.0300	0.3087	0.0499	0.0362	6	-0.96	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0482	0.2850	0.0300	0.3087	0.0499	0.0362	6	-0.42	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0096	0.2900	0.0000	0.3087	0.0499	0.0362	6	-0.33	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0035	0.3135	0.0970	0.3087	0.0499	0.0362	6	0.09	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0354	0.3250	0.0100	0.3087	0.0499	0.0362	6	0.29	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0402	0.6400	0.0500	0.3087	0.0499	0.0362	6	5.91	High	0
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	0423	0.2615	0.0150				1			0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0106	0.1744	0.0013	0.2576	0.0563	0.0068	5	-1.48		0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0493	0.2380	0.0000	0.2576	0.0563	0.0068	5	-0.35		0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0494	0.2655	0.0029	0.2576	0.0563	0.0068	5	0.14		0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0086	0.2851	0.0137	0.2576	0.0563	0.0068	5	0.49		0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0527	0.3251	0.0159	0.2576	0.0563	0.0068	5	1.20		0
101.99	Acid Soluble Ca, Other (%)	0389	0.2600	0.0000	0.6440	0.6122	0.0900	3	-0.63		0
101.99	Acid Soluble Ca, Other (%)	0390	0.3220	0.0100	0.6440	0.6122	0.0900	3	-0.53		0
101.99	Acid Soluble Ca, Other (%)	0552	1.350	0.2600	0.6440	0.6122	0.0900	3	1.15		0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (%)	0553	0.8850	0.0900				1			0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0035	0.0460	0.0020	0.6646	0.0908	0.0157	6	-6.07	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0354	0.6500	0.0000	0.6646	0.0908	0.0157	6	-0.14	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0096	0.6550	0.0100	0.6646	0.0908	0.0157	6	-0.09	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0482	0.6750	0.0500	0.6646	0.0908	0.0157	6	0.10	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0390	0.7090	0.0320	0.6646	0.0908	0.0157	6	0.44	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0472	0.7700	0.0000	0.6646	0.0908	0.0157	6	1.03	OK	0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (%)	0423	0.6370	0.0080				1			0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0515	0.5281	0.0137	0.6429	0.0777	0.0116	5	-1.29		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0106	0.6288	0.0204	0.6429	0.0777	0.0116	5	-0.16		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0494	0.6301	0.0117	0.6429	0.0777	0.0116	5	-0.14		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0527	0.6964	0.0123	0.6429	0.0777	0.0116	5	0.60		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0493	0.7310	0.0000	0.6429	0.0777	0.0116	5	0.99		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0086	0.6083	0.1261	0.6429	0.0777	0.0116	5	-0.39		1
121.99	Acid Soluble Mg, Other (%)	0515	0.5424	0.0104	0.7652	0.2525	0.0608	5	-0.88		0
121.99	Acid Soluble Mg, Other (%)	0389	0.6300	0.0000	0.7652	0.2525	0.0608	5	-0.54		0
121.99	Acid Soluble Mg, Other (%)	0516	0.6850	0.0100	0.7652	0.2525	0.0608	5	-0.32		0
121.99	Acid Soluble Mg, Other (%)	0524	0.7788	0.1237	0.7652	0.2525	0.0608	5	0.05		0
121.99	Acid Soluble Mg, Other (%)	0552	1.190	0.1600	0.7652	0.2525	0.0608	5	1.68		0
143.99	Elemental S, Other (%)	0472	2.150	0.0200	2.247	0.0950	0.0400	3	-1.02		0
143.99	Elemental S, Other (%)	0390	2.250	0.0800	2.247	0.0950	0.0400	3	0.04		0
143.99	Elemental S, Other (%)	0389	2.340	0.0200	2.247	0.0950	0.0400	3	0.98		0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0515	1.859	0.2871	2.093	0.1991	0.1767	4	-1.17		0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0402	2.080	0.2800	2.093	0.1991	0.1767	4	-0.06		0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0527	2.086	0.0037	2.093	0.1991	0.1767	4	-0.03		0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0494	2.346	0.1359	2.093	0.1991	0.1767	4	1.27		0
148.99	Total S, Other (%)	0096	2.210	0.0800	2.308	0.1097	0.1400	4	-0.89		0
148.99	Total S, Other (%)	0354	2.215	0.1100	2.308	0.1097	0.1400	4	-0.84		0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
148.99	Total S, Other (%)	0516	2.400	0.2000	2.308	0.1097	0.1400	4	0.84		0
148.99	Total S, Other (%)	0482	2.405	0.1700	2.308	0.1097	0.1400	4	0.89		0
149.04	S - HNO3 soluble, ICP (%)	0423	2.610	0.0600				2			0
149.04	S - HNO3 soluble, ICP (%)	0524	2.660	0.4298				2			0
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	< 50					0			5
151.30	Acid Soluble As, ICP (ppm)	0096	1.150	0.1000	2.087	1.332	0.6508	4	-0.70		0
151.30	Acid Soluble As, ICP (ppm)	0450	1.450	0.1000	2.087	1.332	0.6508	4	-0.48		0
151.30	Acid Soluble As, ICP (ppm)	0524	1.693	0.6870	2.087	1.332	0.6508	4	-0.30		0
151.30	Acid Soluble As, ICP (ppm)	0255	4.057	1.716	2.087	1.332	0.6508	4	1.48		0
151.30	Acid Soluble As, ICP (ppm)	0555	< 0.5		2.087	1.332	0.6508	4			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0527	1.127	0.0303	1.689	0.6341	0.0892	3	-0.89		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0136	1.565	0.0900	1.689	0.6341	0.0892	3	-0.20		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0494	2.377	0.1474	1.689	0.6341	0.0892	3	1.08		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0515	0.0000	0.0000	1.689	0.6341	0.0892	3			4
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
151.99	Acid Soluble As, Other (ppm)	0481	1.405	0.0100	1.910	0.4666	0.0400	3	-1.08		0
151.99	Acid Soluble As, Other (ppm)	0405	2.000	0.0000	1.910	0.4666	0.0400	3	0.19		0
151.99	Acid Soluble As, Other (ppm)	0506	2.325	0.1100	1.910	0.4666	0.0400	3	0.89		0
151.99	Acid Soluble As, Other (ppm)	0520	< 0.04		1.910	0.4666	0.0400	3			5
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0106	0.0057	0.0019	0.0501	0.0649	0.0666	3	-0.68		0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0354	0.0200	0.0000	0.0501	0.0649	0.0666	3	-0.46		0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0086	0.1245	0.1978	0.0501	0.0649	0.0666	3	1.15		0
165.99	Acid Soluble B, Other (%)	0515	0.0046	0.0006	0.0093	0.0036	0.0008	5	-1.13		0
165.99	Acid Soluble B, Other (%)	0524	0.0078	0.0007	0.0093	0.0036	0.0008	5	-0.37		0
165.99	Acid Soluble B, Other (%)	0423	0.0095	0.0010	0.0093	0.0036	0.0008	5	0.06		0
165.99	Acid Soluble B, Other (%)	0472	0.0100	0.0000	0.0093	0.0036	0.0008	5	0.18		0
165.99	Acid Soluble B, Other (%)	0527	0.0145	0.0017	0.0093	0.0036	0.0008	5	1.26		0
165.99	Acid Soluble B, Other (%)	0516	0.0450	0.0100	0.0093	0.0036	0.0008	5	8.69		1
165.99	Acid Soluble B, Other (%)	0552	0.0000	0.0000	0.0093	0.0036	0.0008	5			4
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	33.42	0.3903				2			0
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	36.50	0.1000				2			0
181.30	Acid Soluble Cd, ICP (ppm)	0035	0.4275	0.0930	30.27	16.26	0.9831	9	-1.69	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0389	3.371	0.0290	30.27	16.26	0.9831	9	-1.53	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0444	31.56	0.0400	30.27	16.26	0.9831	9	0.07	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0555	33.80	0.8000	30.27	16.26	0.9831	9	0.20	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0394	35.85	0.1000	30.27	16.26	0.9831	9	0.32	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0096	36.95	0.9000	30.27	16.26	0.9831	9	0.38	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0482	37.55	0.3000	30.27	16.26	0.9831	9	0.41	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0450	39.90	4.000	30.27	16.26	0.9831	9	0.55	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0524	45.11	2.586	30.27	16.26	0.9831	9	0.84	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0255	18.98	14.89	30.27	16.26	0.9831	9	-0.64	NA	1
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0515	31.33	1.316	37.76	4.637	1.507	6	-1.24	NA	0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0086	36.23	1.903	37.76	4.637	1.507	6	-0.30	NA	0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0136	36.80	0.6000	37.76	4.637	1.507	6	-0.19	NA	0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0494	37.97	1.702	37.76	4.637	1.507	6	0.04	NA	0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0527	41.49	0.9981	37.76	4.637	1.507	6	0.72	NA	0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0233	42.76	2.520	37.76	4.637	1.507	6	0.96	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				
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	0515	33.50	1.216				1			0
181.99	Acid Soluble Cd, Other (ppm)	0520	24.96	0.5600	36.22	9.252	0.8400	4	-1.22		0
181.99	Acid Soluble Cd, Other (ppm)	0405	35.65	0.3000	36.22	9.252	0.8400	4	-0.06		0
181.99	Acid Soluble Cd, Other (ppm)	0481	36.65	0.1000	36.22	9.252	0.8400	4	0.05		0
181.99	Acid Soluble Cd, Other (ppm)	0506	47.60	2.400	36.22	9.252	0.8400	4	1.23		0
191.00	Acid Soluble Cr, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	194.5	0.0000				2			0
191.00	Acid Soluble Cr, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	210.6	3.400				2			0
191.30	Acid Soluble Cr, ICP (ppm)	0389	6.620	0.0600	143.3	103.5	1.539	7	-1.19	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0035	14.35	0.3000	143.3	103.5	1.539	7	-1.13	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0444	183.0	0.0000	143.3	103.5	1.539	7	0.35	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0524	183.9	3.415	143.3	103.5	1.539	7	0.35	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0482	202.0	2.000	143.3	103.5	1.539	7	0.51	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0394	202.5	3.000	143.3	103.5	1.539	7	0.52	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0096	210.7	2.000	143.3	103.5	1.539	7	0.59	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0450	202.0	12.00	143.3	103.5	1.539	7	0.51	NA	1
191.30	Acid Soluble Cr, ICP (ppm)	0555	< 0.5		143.3	103.5	1.539	7			5
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0515	0.0206	0.0079	162.0	108.1	4.799	4	-1.50		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0086	210.2	6.920	162.0	108.1	4.799	4	0.45		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0494	216.0	6.305	162.0	108.1	4.799	4	0.50		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0527	221.6	5.965	162.0	108.1	4.799	4	0.55		0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0515	0.0199	0.0007				1			0
191.99	Acid Soluble Cr, Other (ppm)	0520	132.4	4.180	208.7	52.71	3.645	4	-1.45		0
191.99	Acid Soluble Cr, Other (ppm)	0405	222.5	9.000	208.7	52.71	3.645	4	0.26		0
191.99	Acid Soluble Cr, Other (ppm)	0481	226.5	0.4000	208.7	52.71	3.645	4	0.34		0
191.99	Acid Soluble Cr, Other (ppm)	0506	253.5	1.000	208.7	52.71	3.645	4	0.85		0
202.30	Acid Soluble Co, ICP (ppm)	0389	0.8870	0.1440				2			0
202.30	Acid Soluble Co, ICP (ppm)	0524	1.727	0.0338				2			0
202.30	Acid Soluble Co, ICP (ppm)	0555	< 0.5					2			5
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0527	0.5945	0.0037	1.156	0.7071	0.0288	3	-0.79		0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0086	0.9233	0.0827	1.156	0.7071	0.0288	3	-0.33		0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0550	1.950	0.0000	1.156	0.7071	0.0288	3	1.12		0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0515	0.0000	0.0000	1.156	0.7071	0.0288	3			4
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0136	< 5		1.156	0.7071	0.0288	3			5
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
202.99	Acid Soluble Co, Other (ppm)	0520	0.2500	0.0200	1.303	1.491	1.124	3	-0.71		0
202.99	Acid Soluble Co, Other (ppm)	0405	0.6500	0.1000	1.303	1.491	1.124	3	-0.44		0
202.99	Acid Soluble Co, Other (ppm)	0255	3.009	3.253	1.303	1.491	1.124	3	1.14		0
202.99	Acid Soluble Co, Other (ppm)	0481	< 10		1.303	1.491	1.124	3			5
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	0550	0.0002	0.0001				1			0
221.03	Acid Soluble Cu, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	0526	0.0002	0.0000				1			0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0444	0.0001	0.0000	0.3100	0.2688	0.3200	3	-0.93		0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0450	0.4500	0.3000	0.3100	0.2688	0.3200	3	0.42		0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0552	0.4800	0.6600	0.3100	0.2688	0.3200	3	0.51		0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0095	0.0000	0.0000	0.3100	0.2688	0.3200	3			4
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0255	0.0000	0.0000	0.3100	0.2688	0.3200	3			4
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0402	0.0000	0.0000	0.3100	0.2688	0.3200	3			4
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0354	< 0.01		0.3100	0.2688	0.3200	3			5

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0515	0.0001	0.0000				1			0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0527	< 0.0001					1			5
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0136	< 0.0005					1			5
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0555	< 0.5					1			5
221.99	Acid Soluble Cu, Other (%)	0389	0.0001	0.0000	0.0080	0.0126	0.0023	4	-0.53		0
221.99	Acid Soluble Cu, Other (%)	0515	0.0003	0.0002	0.0080	0.0126	0.0023	4	-0.52		0
221.99	Acid Soluble Cu, Other (%)	0516	0.0050	0.0080	0.0080	0.0126	0.0023	4	-0.20		0
221.99	Acid Soluble Cu, Other (%)	0506	0.0265	0.0010	0.0080	0.0126	0.0023	4	1.25		0
221.99	Acid Soluble Cu, Other (%)	0405	0.0000	0.0000	0.0080	0.0126	0.0023	4			4
221.99	Acid Soluble Cu, Other (%)	0524	0.0001	0.0001	0.0080	0.0126	0.0023	4			4
221.99	Acid Soluble Cu, Other (%)	0481	< 0.001		0.0080	0.0126	0.0023	4			5
221.99	Acid Soluble Cu, Other (%)	0027	< 0.005		0.0080	0.0126	0.0023	4			5
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0390	0.4245	0.0090	0.4553	0.0212	0.0181	7	-1.31	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0096	0.4350	0.0100	0.4553	0.0212	0.0181	7	-0.86	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0402	0.4563	0.0375	0.4553	0.0212	0.0181	7	0.04	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0354	0.4600	0.0000	0.4553	0.0212	0.0181	7	0.20	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0035	0.4660	0.0200	0.4553	0.0212	0.0181	7	0.46	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0472	0.4700	0.0000	0.4553	0.0212	0.0181	7	0.63	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0482	0.4750	0.0500	0.4553	0.0212	0.0181	7	0.84	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0552	2.830	3.760	0.4553	0.0212	0.0181	7	101.15	High	2
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (%)	0423	0.4190	0.0020				1			0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0515	0.4273	0.0059	0.4449	0.0130	0.0075	6	-1.22	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0086	0.4423	0.0042	0.4449	0.0130	0.0075	6	-0.18	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0106	0.4431	0.0162	0.4449	0.0130	0.0075	6	-0.13	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0494	0.4439	0.0002	0.4449	0.0130	0.0075	6	-0.07	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0493	0.4510	0.0000	0.4449	0.0130	0.0075	6	0.42	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0527	0.4620	0.0184	0.4449	0.0130	0.0075	6	1.17	OK	0
241.99	Acid Soluble Fe, Other (%)	0389	0.4100	0.0000	0.4674	0.0639	0.0263	4	-0.90		0
241.99	Acid Soluble Fe, Other (%)	0515	0.4304	0.0133	0.4674	0.0639	0.0263	4	-0.58		0
241.99	Acid Soluble Fe, Other (%)	0516	0.4750	0.0100	0.4674	0.0639	0.0263	4	0.12		0
241.99	Acid Soluble Fe, Other (%)	0524	0.5543	0.0819	0.4674	0.0639	0.0263	4	1.36		0
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	6.315	1.250				1			0
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	< 0.013					1			5
251.30	Acid Soluble Pb, ICP (ppm)	0524	0.0441	0.0305	1.227	1.271	1.019	4	-0.93		0
251.30	Acid Soluble Pb, ICP (ppm)	0450	0.2500	0.1000	1.227	1.271	1.019	4	-0.77		0
251.30	Acid Soluble Pb, ICP (ppm)	0394	2.020	0.4000	1.227	1.271	1.019	4	0.62		0
251.30	Acid Soluble Pb, ICP (ppm)	0255	2.593	3.546	1.227	1.271	1.019	4	1.07		0
251.30	Acid Soluble Pb, ICP (ppm)	0555	< 0.5		1.227	1.271	1.019	4			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0527	0.2976	0.0016	0.6865	0.6629	0.1012	3	-0.59		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0136	0.3100	0.0800	0.6865	0.6629	0.1012	3	-0.57		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0515	1.452	0.2221	0.6865	0.6629	0.1012	3	1.15		0
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
251.99	Acid Soluble Pb, Other (ppm)	0506	0.3420	0.0420				2			0
251.99	Acid Soluble Pb, Other (ppm)	0405	0.8500	0.1000				2			0
251.99	Acid Soluble Pb, Other (ppm)	0520	< 0.04					2			5
251.99	Acid Soluble Pb, Other (ppm)	0481	< 0.5					2			5
261.00	Acid Soluble Mn, AA, Mn2+ only (%)	0553	0.0095	0.0010				1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0472	0.0100	0.0000	0.0110	0.0009	0.0002	4	-1.12		0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0096	0.0106	0.0003	0.0110	0.0009	0.0002	4	-0.51		0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0035	0.0115	0.0006	0.0110	0.0009	0.0002	4	0.54		0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0390	0.0120	0.0000	0.0110	0.0009	0.0002	4	1.09		0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0354	< 0.01		0.0110	0.0009	0.0002	4			5
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (%)	0552	0.6100	0.7600				1			0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (%)	0402	0.0000	0.0000				1			4
261.33	Acid Soluble Mn, ICP, test portion organic 965.09 (%)	0086	0.0111	0.0007				1			0
261.34	Acid Soluble Mn, ICP, test portion 2006.03A-C (%)	0423	0.0105	0.0010				1			0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0106	0.0089	0.0005	0.0102	0.0013	0.0002	3	-1.06		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0494	0.0104	0.0001	0.0102	0.0013	0.0002	3	0.13		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0527	0.0114	0.0001	0.0102	0.0013	0.0002	3	0.93		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0515	0.0000	0.0000	0.0102	0.0013	0.0002	3			4
261.99	Acid Soluble Mn, Other (%)	0515	0.0009	0.0001	0.0129	0.0123	0.0052	4	-0.98		0
261.99	Acid Soluble Mn, Other (%)	0389	0.0097	0.0001	0.0129	0.0123	0.0052	4	-0.26		0
261.99	Acid Soluble Mn, Other (%)	0524	0.0109	0.0004	0.0129	0.0123	0.0052	4	-0.16		0
261.99	Acid Soluble Mn, Other (%)	0516	0.0300	0.0200	0.0129	0.0123	0.0052	4	1.40		0
281.00	Acid Soluble Hg, AA (ppm)	0550	< 0.001					0			5
281.00	Acid Soluble Hg, AA (ppm)	0526	< 60					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0450	0.0000	0.0000				0			4
281.30	Acid Soluble Hg, ICP (ppm)	0515	0.0000	0.0000				0			4
281.30	Acid Soluble Hg, ICP (ppm)	0527	< 0.0001					0			5
281.99	Acid Soluble Hg, Other (ppm)	0035	0.0142	0.0039				1			0
281.99	Acid Soluble Hg, Other (ppm)	0520	< 0.007					1			5
281.99	Acid Soluble Hg, Other (ppm)	0405	< 0.01					1			5
281.99	Acid Soluble Hg, Other (ppm)	0481	< 0.5					1			5
289.00	Acid Soluble Mo, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	2.025	0.1900				1			0
289.00	Acid Soluble Mo, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	< 0.021					1			5
289.30	Acid Soluble Mo, ICP (ppm)	0255	1.639	1.436	6.432	7.668	0.3367	5	-0.55		0
289.30	Acid Soluble Mo, ICP (ppm)	0096	2.300	0.0000	6.432	7.668	0.3367	5	-0.47		0
289.30	Acid Soluble Mo, ICP (ppm)	0450	3.750	0.1000	6.432	7.668	0.3367	5	-0.31		0
289.30	Acid Soluble Mo, ICP (ppm)	0524	4.469	0.1474	6.432	7.668	0.3367	5	-0.22		0
289.30	Acid Soluble Mo, ICP (ppm)	0516	20.00	0.0000	6.432	7.668	0.3367	5	1.54		0
289.30	Acid Soluble Mo, ICP (ppm)	0035	4.180	4.240	6.432	7.668	0.3367	5	-0.26		1
289.30	Acid Soluble Mo, ICP (ppm)	0555	< 0.5		6.432	7.668	0.3367	5			5
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0106	0.0005	0.0001	2.967	2.637	0.1104	5	-1.12		0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0515	0.2396	0.1069	2.967	2.637	0.1104	5	-1.03		0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0494	4.294	0.2083	2.967	2.637	0.1104	5	0.50		0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0527	4.774	0.1268	2.967	2.637	0.1104	5	0.69		0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0423	5.525	0.1100	2.967	2.637	0.1104	5	0.97		0
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	0515	0.3472	0.5843				1			0
289.99	Acid Soluble Mo, Other (ppm)	0405	4.350	0.0400				1			0
289.99	Acid Soluble Mo, Other (ppm)	0520	< 0.04					1			5
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)	0526	5.890	0.3947				2			0
291.00	Acid Soluble Ni, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	17.95	1.750				2			0
291.30	Acid Soluble Ni, ICP (ppm)	0035	3.290	1.560	7.768	3.245	0.5325	8	-1.26	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				
291.30	Acid Soluble Ni, ICP (ppm)	0389	4.671	0.2520	7.768	3.245	0.5325	8	-0.87	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0096	6.450	0.1000	7.768	3.245	0.5325	8	-0.37	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0444	7.890	0.1800	7.768	3.245	0.5325	8	0.03	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0482	8.800	0.2000	7.768	3.245	0.5325	8	0.29	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0524	9.393	0.4682	7.768	3.245	0.5325	8	0.46	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0450	9.500	1.000	7.768	3.245	0.5325	8	0.49	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0394	12.15	0.5000	7.768	3.245	0.5325	8	1.24	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0555	< 0.5		7.768	3.245	0.5325	8			5
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0515	4.767	0.0190	8.239	3.018	0.1700	3	-1.15		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0494	9.714	0.1931	8.239	3.018	0.1700	3	0.49		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0527	10.24	0.2980	8.239	3.018	0.1700	3	0.66		0
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0515	6.605	0.1340				1			0
291.99	Acid Soluble Ni, Other (ppm)	0481	6.420	0.4000	14.19	12.02	2.123	5	-0.65		0
291.99	Acid Soluble Ni, Other (ppm)	0520	7.800	0.2400	14.19	12.02	2.123	5	-0.53		0
291.99	Acid Soluble Ni, Other (ppm)	0405	10.60	0.2000	14.19	12.02	2.123	5	-0.30		0
291.99	Acid Soluble Ni, Other (ppm)	0506	10.70	0.0000	14.19	12.02	2.123	5	-0.29		0
291.99	Acid Soluble Ni, Other (ppm)	0255	35.44	9.777	14.19	12.02	2.123	5	1.77		0
301.00	Acid Soluble Se, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	< 0.08					0			5
301.00	Acid Soluble Se, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	< 0.23					0			5
301.30	Acid Soluble Se, ICP (ppm)	0524	1.975	1.390				1			0
301.30	Acid Soluble Se, ICP (ppm)	0555	< 0.5					1			5
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0527	3.131	0.2395				1			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0515	0.0000	0.0000				1			4
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
301.99	Acid Soluble Se, Other (ppm)	0255	6.285	1.696				1			0
301.99	Acid Soluble Se, Other (ppm)	0520	< 0.04					1			5
301.99	Acid Soluble Se, Other (ppm)	0481	< 0.5					1			5
301.99	Acid Soluble Se, Other (ppm)	0405	< 1					1			5
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0035	0.0465	0.0050	0.1302	0.0562	0.0102	4	-1.49		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0423	0.1505	0.0050	0.1302	0.0562	0.0102	4	0.36		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0527	0.1578	0.0004	0.1302	0.0562	0.0102	4	0.49		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0086	0.1660	0.0302	0.1302	0.0562	0.0102	4	0.64		0
311.99	Sodium, Other (%)	0482	0.1600	0.0200	0.1867	0.0379	0.0067	3	-0.70		0
311.99	Sodium, Other (%)	0096	0.1700	0.0000	0.1867	0.0379	0.0067	3	-0.44		0
311.99	Sodium, Other (%)	0354	0.2300	0.0000	0.1867	0.0379	0.0067	3	1.14		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0550	0.0285	0.0047				1			0
321.03	Acid Soluble Zn, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	0526	0.0497	0.0013				1			0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0444	0.0368	0.0008	0.0454	0.0037	0.0027	12	-2.30	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0472	0.0400	0.0000	0.0454	0.0037	0.0027	12	-1.44	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0255	0.0430	0.0040	0.0454	0.0037	0.0027	12	-0.64	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0402	0.0449	0.0052	0.0454	0.0037	0.0027	12	-0.13	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0354	0.0450	0.0100	0.0454	0.0037	0.0027	12	-0.11	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0482	0.0450	0.0100	0.0454	0.0037	0.0027	12	-0.11	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0390	0.0455	0.0010	0.0454	0.0037	0.0027	12	0.03	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0231	0.0465	0.0010	0.0454	0.0037	0.0027	12	0.30	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0035	0.0474	0.0004	0.0454	0.0037	0.0027	12	0.54	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0096	0.0477	0.0001	0.0454	0.0037	0.0027	12	0.60	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				
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0095	0.0500	0.0000	0.0454	0.0037	0.0027	12	1.23	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0234	0.0500	0.0000	0.0454	0.0037	0.0027	12	1.23	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0552	3.035	3.710	0.0454	0.0037	0.0027	12	799.48	High	2
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0423	0.0565	0.0010				1			0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0106	0.0399	0.0041	0.0452	0.0048	0.0016	7	-1.02	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0515	0.0410	0.0029	0.0452	0.0048	0.0016	7	-0.81	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0494	0.0439	0.0001	0.0452	0.0048	0.0016	7	-0.26	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0086	0.0454	0.0020	0.0452	0.0048	0.0016	7	0.03	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0136	0.0455	0.0010	0.0452	0.0048	0.0016	7	0.05	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0043	0.0500	0.0000	0.0452	0.0048	0.0016	7	0.90	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0527	0.0511	0.0014	0.0452	0.0048	0.0016	7	1.11	OK	0
321.99	Acid Soluble Zn, Other (%)	0520	0.0287	0.0000	0.0426	0.0072	0.0005	8	-1.76	Low	0
321.99	Acid Soluble Zn, Other (%)	0558	0.0380	0.0000	0.0426	0.0072	0.0005	8	-0.58	OK	0
321.99	Acid Soluble Zn, Other (%)	0389	0.0390	0.0000	0.0426	0.0072	0.0005	8	-0.45	OK	0
321.99	Acid Soluble Zn, Other (%)	0481	0.0400	0.0000	0.0426	0.0072	0.0005	8	-0.33	OK	0
321.99	Acid Soluble Zn, Other (%)	0515	0.0456	0.0014	0.0426	0.0072	0.0005	8	0.39	OK	0
321.99	Acid Soluble Zn, Other (%)	0524	0.0477	0.0014	0.0426	0.0072	0.0005	8	0.65	OK	0
321.99	Acid Soluble Zn, Other (%)	0405	0.0485	0.0015	0.0426	0.0072	0.0005	8	0.75	OK	0
321.99	Acid Soluble Zn, Other (%)	0516	0.0500	0.0000	0.0426	0.0072	0.0005	8	0.94	OK	0
325.00	Water Soluble Zn, AA (%)	0027	0.0160	0.0020				1			0
325.30	Water Soluble Zn, ICP (%)	0555	0.0475	0.0010				1			0

Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or -2 and -3 (warning) and Green = Z < 2 and >-2 (OK at 95%). Flags indicate data usage: 0 = Used, 1 = rejected for duplicates too far apart, 2 = rejected as extreme outlier, 3 = removed from stats, 4 = rejected due to 0s submitted and 5 = LOD. A 9 flag indicates a data problem - scores not calculated. Robust statistics not used if < 6 labs used in calculations, in this case the Z Scores are grey and included for information only. IA Status describes where your result is relative to the Assigned Value ± IA. Red indicates Higher or Lower, Green indicates within the IA range. Method codes in light green indicate a guaranteed analyte. Individual lab values may be below detection limits but are reported solely for the purpose of this Proficiency Testing program.