

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 200811

WS 20-20-20 w/micros

### Statistical Summary

# Methods: 144

# Labs Reporting: 69

Issue Date : 09/30/2020

Method Code	Analyte & Method Sample # 200811	# 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 (%)	8	8	3.427	0.6285	3.349		0.5162	0.2281	15.41%		0.1286	3.33%
001.99	Ammoniacal N, Other (%)	13	13	3.274	0.4847	3.272		0.5457	0.1892	16.68%		0.0803	3.35%
002.20	Nitrate N, Jones Modified (%)	1		9.735									
002.99	Nitrate N, Other (%)	10	10	6.588	1.118	6.576		0.9537	0.3770	14.50%		0.1089	3.01%
005.00	Urea N, Urease (as N) (%)	3	3	10.05	1.261	10.05		1.261	0.9101	12.54%		0.2370	2.83%
005.10	Urea N, HPLC(asN),H2Omobilephase (%)	1		9.862									
005.99	Urea N, Other (%)	7	7	10.08	1.336	10.00		1.346	0.6360	13.46%		0.3073	2.83%
007.00	Urea, Urease (as Urea) (%)	1		10.60									
007.99	Urea, Other (%)	1		10.05									
009.10	Ammoniacal Plus Nitrate N, Devarda (%)	1		10.18									
010.11	Total N, Modified Comprehensive (20%)	4	4	16.12	7.863	16.12	0.6718	7.863	4.914	48.78%	27.27	0.1525	2.63%
010.12	Total N, Salicylic (20%)	2	2	20.75	1.561								
010.16	Total N, Raney (20%)	1		18.60									
010.60	Total N, Combustion (20%)	50	49	20.20	0.7389	20.20	0.7320	0.5328	0.0951	2.64%	1.70	0.2861	2.54%
010.99	Total N, Other (20%)	5	5	19.22	1.704	19.22	0.7183	1.704	0.9527	8.87%	5.53	0.0798	2.56%
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	2	2	14.76	0.0743								
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	8	7	14.77	0.1883	14.77		0.2120	0.1002	1.44%		0.0527	2.67%
020.40	Total P2O5, Automated (%)	2	2	14.40	0.0460								
020.50	Total P2O5, ICP (%)	19	18	15.50	3.509	14.79		1.048	0.3087	7.09%		0.2610	2.67%
020.99	Total P2O5, Other (%)	3	3	16.44	3.205	16.44		3.205	2.313	19.50%		0.5311	2.62%
030.20	Citrate Insoluble P2O5, Spectrophotometric MolybdovanadoP (%)	1		0.0100									
030.40	Citrate Insoluble P2O5, Automated, test portion 963.03 A-B (%)	1		0.0200									
040.20	Indirect Available P2O5, Spectrophotometric (20%)	1		14.90									
040.40	Indirect Available P2O5, Automated (20%)	1		14.35									
040.99	Indirect Available P2O5, Other (20%)	1		14.82									
041.10	Direct Available P2O5, Gravimetric Quinolinium (20%)	4	4	14.45	0.2396	14.45	0.7000	0.2396	0.1498	1.66%	0.80	0.1777	2.68%
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (20%)	5	5	15.04	0.5368	15.04	0.7000	0.5368	0.3001	3.57%	1.79	0.0480	2.66%
041.20	Direct Available P2O5, Spectrophotometric (20%)	2	2	14.39	0.4822								
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (20%)	7	7	14.79	0.7743	14.75	0.7000	0.7038	0.3325	4.77%	2.34	0.1568	2.67%
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (20%)	3	3	14.33	1.159	14.33	0.7000	1.159	0.8365	8.09%	3.86	0.2633	2.68%
041.50	Direct Available P2O5, ICP (20%)	2	2	15.52	1.174								
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	10	9	14.71	0.4537	14.67	0.7000	0.4104	0.1710	2.80%	1.37	0.1722	2.67%
041.99	Direct Available P2O5, Other (20%)	1		19.98									

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048.10	Water Soluble P2O5, Gravimetric Quinolinium (%)	1		14.59									
048.20	Water Soluble P2O5, Spectrophotometric (%)	2	2	14.84	0.2185								
048.40	Water Soluble P2O5, Automated (%)	1		14.48									
048.50	Water Soluble P2O5, ICP (%)	2	2	14.42	0.3468								
048.99	Water Soluble P2O5, Other (%)	1		14.46									
050.00	Soluble K2O, STPB Oxalate (20%)	10	9	24.06	1.591	23.82	1.2045	1.158	0.4824	4.86%	2.24	0.2911	2.48%
050.30	Soluble K2O, AA (Oxalate) (20%)	5	5	23.94	1.311	23.94	1.2082	1.311	0.7327	5.47%	2.53	0.6574	2.48%
050.31	Soluble K2O, AA (Citrate) (20%)	2	2	21.58	0.5303								
050.50	Soluble K2O, ICP (Oxalate) (20%)	6	6	24.00	1.442	24.00	1.2100	1.635	0.8346	6.81%	3.15	0.3467	2.48%
050.51	Soluble K2O, ICP (Citrate) (20%)	2	2	24.22	1.508								
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	10	10	23.66	0.5433	23.65	1.1995	0.5908	0.2335	2.50%	1.15	0.4855	2.48%
050.60	Soluble K2O, Flame Photometric (Oxalate) (20%)	2	2	21.91	0.6718								
050.61	Soluble K2O, Flame Photometric (Citrate) (20%)	1		24.42									
050.62	Soluble K2O, Flame Photometric (Citrate-EDTA) (20%)	4	4	23.85	0.9616	23.85	1.2056	0.9616	0.6010	4.03%	1.86	0.8100	2.48%
050.99	Soluble K2O, Other (20%)	25	24	23.10	3.803	23.28	1.1884	2.968	0.7572	12.75%	5.82	0.3906	2.49%
060.00	Water (Free), Vacuum Oven (%)	1		0.6950									
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	3	3	0.0149	0.0087	0.0149	0.2007	0.0087	0.0063	58.38%	0.10	0.0041	7.53%
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	2	0	0.0010									
101.99	Acid Soluble Ca, Other (%)	1		1.135									
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	2	1	0.0100									
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	3	3	0.0130	0.0022	0.0130	0.2007	0.0022	0.0016	17.12%	0.03	0.0007	7.69%
121.99	Acid Soluble Mg, Other (%)	5	5	0.0886	0.1346	0.0886	0.2044	0.1346	0.0752	151.91%	1.53	0.0818	5.76%
143.99	Elemental S, Other (%)	2	2	0.0475	0.0106								
148.07	Total S, ICP, test portion as in 2017.02 (%)	4	2	0.0493	0.0048	0.0493	0.2025	0.0048	0.0043	9.83%	0.06	0.0069	6.29%
148.99	Total S, Other (%)	4	4	0.0706	0.0339	0.0706	0.2035	0.0339	0.0212	47.96%	0.39	0.0053	5.96%
149.04	S - HNO3 soluble, ICP (%)	1		0.0503									
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid (ppm)	1		0.2000									
151.30	Acid Soluble As, ICP (ppm)	4	4	0.1359	0.0484	0.1359		0.0484	0.0303	35.63%		0.0108	21.60%
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	2	1	0.1050									
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	6	1	0.2397		0.1359		0.0484	0.0605	35.63%		0.0118	21.60%
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	2	0	0.0000									
151.99	Acid Soluble As, Other (ppm)	2	1	0.6500									
165.00	Acid Soluble B, Spectrophotometric (0.02%)	4	4	0.0295	0.0140	0.0295	0.0074	0.0140	0.0088	47.50%	4.40	0.0050	6.80%
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	13	12	0.0177	0.0039	0.0185	0.0058	0.0025	0.0009	13.69%	1.02	0.0002	7.29%
165.99	Acid Soluble B, Other (0.02%)	16	15	0.0261	0.0264	0.0199	0.0060	0.0024	0.0008	12.20%	0.95	0.0015	7.21%
171.10	Water Soluble B, Spectrophotometric (%)	1		0.0195									
171.99	Water Soluble B, Other (%)	2	2	0.0192	0.0011								
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	1		0.1000									
181.30	Acid Soluble Cd, ICP (ppm)	5	4	0.0114	0.0083	0.0114		0.0083	0.0052	73.13%		0.0037	31.39%
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	2	1	0.0300									
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	5	1	0.0224		0.0114		0.0083	0.0104	73.13%		0.0042	31.39%
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	2	0	0.0000									
181.99	Acid Soluble Cd, Other (ppm)	2	0	0.0100									
191.30	Acid Soluble Cr, ICP (ppm)	7	6	1.326	0.6444	1.326		0.7307	0.3729	55.10%		0.0409	15.33%

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191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	2	1	0.2750									
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	3	3	5.559	8.927	5.559		8.927	6.442	160.59%		4.040	12.36%
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	2	2	0.9074	1.070								
191.99	Acid Soluble Cr, Other (ppm)	2	1	1.900									
202.30	Acid Soluble Co, ICP (ppm)	3	3	0.3467	0.0800	0.3467	1.1040	0.0800	0.0577	23.07%	0.17	0.0590	18.76%
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	2	1	0.2000									
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	6	3	0.2980	0.0846	0.2980	1.0894	0.0846	0.0610	28.38%	0.18	0.0869	19.19%
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	2	1	2.360									
202.99	Acid Soluble Co, Other (ppm)	3	3	0.2588	0.1425	0.2588	1.0777	0.1425	0.1029	55.06%	0.31	0.0063	19.61%
221.00	Acid Soluble Cu, AA, inorganic 965.09 (0.05%)	3	3	0.0504	0.0014	0.0504	0.0100	0.0014	0.0010	2.76%	0.32	0.0013	6.27%
221.01	Acid Soluble Cu, AA, organic 965.09 (0.05%)	1		0.0420									
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	19	18	0.0495	0.0051	0.0495	0.0099	0.0052	0.0015	10.49%	1.22	0.0014	6.29%
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (0.05%)	4	4	0.0477	0.0024	0.0477	0.0098	0.0024	0.0015	5.08%	0.58	0.0004	6.32%
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	9	9	0.0497	0.0027	0.0495	0.0100	0.0027	0.0011	5.47%	0.63	0.0024	6.29%
221.99	Acid Soluble Cu, Other (0.05%)	11	10	0.0532	0.0198	0.0480	0.0098	0.0056	0.0022	11.75%	1.34	0.0031	6.32%
241.00	Acid Soluble Fe, AA, inorganic 965.09 (0.1%)	4	4	0.2161	0.2196	0.2161	0.0266	0.2196	0.1373	101.62%	19.23	0.2247	5.04%
241.01	Acid Soluble Fe, AA, organic 965.09 (0.1%)	1		0.0635									
241.03	Acid Soluble Fe, AA, 965.09, test portion 2006.03A-C w/dual acid ... (0.1%)	1		0.1110									
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	20	19	0.1012	0.0092	0.1010	0.0151	0.0099	0.0028	9.77%	1.52	0.0028	5.65%
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (0.1%)	2	2	0.0909	0.0019								
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	11	10	0.1071	0.0214	0.1010	0.0151	0.0037	0.0015	3.65%	0.57	0.0160	5.65%
241.99	Acid Soluble Fe, Other (0.1%)	9	9	0.1021	0.0087	0.1014	0.0151	0.0081	0.0034	8.02%	1.25	0.0021	5.64%
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	1		0.5000									
251.30	Acid Soluble Pb, ICP (ppm)	5	2	0.0349	0.0225	0.0349		0.0225	0.0199	64.48%		0.0109	26.50%
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	2	1	0.0950									
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	5	0	0.0000		0.0349		0.0225		64.48%		0.0000	26.50%
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	2	0	0.0000									
251.99	Acid Soluble Pb, Other (ppm)	2	0	0.2000									
261.12	Acid Soluble Mn, AA, inorganic 965.09 (0.05%)	3	3	0.0510	0.0010	0.0510	0.0101	0.0010	0.0007	2.01%	0.24	0.0032	6.26%
261.13	Acid Soluble Mn, AA, organic 965.09 (0.05%)	1		0.0305									
261.14	Acid Soluble Mn, AA, 965.09, test portion 2006.03A-C (0.05%)	1		0.0500									
261.15	Acid Soluble Mn, AA, 965.09, test portion 2006.03A-C w/dual acid ... (0.05%)	1		0.0515									
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	11	10	0.0488	0.0041	0.0490	0.0099	0.0029	0.0012	5.98%	0.69	0.0005	6.30%
261.31	Acid Soluble Mn, ICP, test portion 972.02b (0.05%)	2	2	0.0487	0.0018								
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (0.05%)	6	5	0.0465	0.0041	0.0465	0.0096	0.0041	0.0023	8.81%	0.99	0.0003	6.35%
261.34	Acid Soluble Mn, ICP, test portion 2006.03A-C (0.05%)	1		0.0380									
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	9	9	0.0489	0.0021	0.0490	0.0099	0.0023	0.0010	4.67%	0.54	0.0012	6.30%
261.99	Acid Soluble Mn, Other (0.05%)	11	11	0.0467	0.0037	0.0468	0.0097	0.0040	0.0015	8.49%	0.96	0.0012	6.34%
271.00	Water Soluble Mn, AA (%)	1		0.0510									
281.30	Acid Soluble Hg, ICP (ppm)	5	0	0.0000		0.0468		0.0040		8.49%		0.0000	25.36%
281.99	Acid Soluble Hg, Other (ppm)	4	1	0.0290		0.0468		0.0040	0.0050	8.49%		0.0020	25.36%
289.30	Acid Soluble Mo, ICP (5ppm)	9	7	4.796	1.974	4.796	2.4387	2.238	1.058	46.68%	2.14	0.7637	12.63%
289.32	Acid Soluble Mo, ICP, 2006.03 (5ppm)	3	3	4.230	2.768	4.230	2.2690	2.768	1.998	65.44%	2.84	0.7533	12.88%
289.33	Acid Soluble Mo, ICP, 2017.02 (5ppm)	7	6	4.327	1.272	4.327	2.2982	1.442	0.7361	33.33%	1.46	0.8774	12.83%

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289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (5ppm)	2	2	6.924	2.367								
289.99	Acid Soluble Mo, Other (5ppm)	2	2	4.335	2.284								
291.30	Acid Soluble Ni, ICP (ppm)	6	5	0.5791	0.6253	0.5791		0.6253	0.3495	107.98%		0.0313	17.37%
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	2	1	0.3450									
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	3	2	0.2053	0.0524	0.2053		0.0524	0.0463	25.50%		0.0178	20.30%
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	2	2	1.422	0.1053								
291.99	Acid Soluble Ni, Other (ppm)	2	1	1.082									
301.30	Acid Soluble Se, ICP (ppm)	2	2	0.1895	0.0842								
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	1		0.0700									
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	5	2	2.716	3.269	2.716		3.269	2.890	120.37%		3.644	13.76%
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	2	1	3.548									
301.99	Acid Soluble Se, Other (ppm)	3	1	3.058		2.716		3.269	4.087	120.37%		0.0940	13.76%
311.33	Sodium, ICP, test portion as in 2017.02 (%)	3	3	0.2272	0.0349	0.2272	0.0277	0.0349	0.0252	15.37%	2.94	0.0100	5.00%
311.99	Sodium, Other (%)	3	3	0.2252	0.0130	0.2252	0.0275	0.0130	0.0094	5.79%	1.10	0.0157	5.01%
321.00	Acid Soluble Zn, AA, inorganic 965.09 (0.05%)	3	3	0.0509	0.0015	0.0509	0.0101	0.0015	0.0011	3.01%	0.35	0.0025	6.26%
321.01	Acid Soluble Zn, AA, organic 965.09 (0.05%)	1		0.0460									
321.02	Acid Soluble Zn, AA, 965.09, test portion 2006.03A-C (0.05%)	1		0.0500									
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	21	20	0.0499	0.0033	0.0495	0.0099	0.0018	0.0005	3.57%	0.41	0.0015	6.29%
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (0.05%)	3	3	0.0476	0.0019	0.0476	0.0098	0.0019	0.0013	3.92%	0.44	0.0006	6.33%
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	11	11	0.0506	0.0016	0.0503	0.0100	0.0012	0.0004	2.33%	0.27	0.0017	6.27%
321.99	Acid Soluble Zn, Other (0.05%)	10	10	0.0591	0.0414	0.0496	0.0100	0.0016	0.0006	3.29%	0.38	0.0008	6.29%
325.00	Water Soluble Zn, AA (%)	1		0.1440									
325.30	Water Soluble Zn, ICP (%)	1		0.0529									

The Method IA Ratio = 2.33 \* Robust SD / IA at the Method Assigned Value. IA ratios of 1 and less indicate participant data dispersion is as good or less than the IA. Red indicates the IA ratio is significantly greater than 1, Orange indicates marginally greater than 1, Green indicates IA ratio is not significantly greater than 1 and Grey indicates < 6 labs reporting.



# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 200811

Method Precision Report

WS 20-20-20 w/micros

Issue Date : 09/30/2020

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
001.99	Ammoniacal N, Other (%)	13	12	3.290	0.5028	0.5011	0.0582	0.5044	15.23%	1.77%	15.33%	8.662
002.99	Nitrate N, Other (%)	10	9	6.608	1.183	1.182	0.0710	1.185	17.89%	1.07%	17.92%	16.69
010.60	Total N, Combustion (20%)	50	46	20.17	0.5479	0.5145	0.2663	0.5793	2.55%	1.32%	2.87%	2.176
020.50	Total P2O5, ICP (%)	19	16	14.78	0.8154	0.8006	0.2186	0.8299	5.42%	1.48%	5.62%	3.797
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	10	9	14.71	0.4537	0.4397	0.1584	0.4673	2.99%	1.08%	3.18%	2.949
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	10	9	23.71	0.5560	0.5123	0.3056	0.5965	2.16%	1.29%	2.52%	1.952
050.99	Soluble K2O, Other (20%)	25	23	23.57	3.102	3.093	0.3421	3.112	13.12%	1.45%	13.20%	9.098
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	13	12	0.0177	0.0039	0.0038	0.0003	0.0039	21.71%	1.76%	21.78%	12.39
165.99	Acid Soluble B, Other (0.02%)	16	14	0.0193	0.0029	0.0027	0.0015	0.0031	14.14%	7.62%	16.06%	2.109
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	19	17	0.0492	0.0050	0.0049	0.0012	0.0051	10.05%	2.47%	10.35%	4.194
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	9	8	0.0490	0.0020	0.0017	0.0015	0.0022	3.38%	3.05%	4.55%	1.491
221.99	Acid Soluble Cu, Other (0.05%)	11	8	0.0478	0.0038	0.0038	0.0010	0.0039	7.92%	2.01%	8.17%	4.067
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	20	18	0.1018	0.0091	0.0089	0.0027	0.0093	8.72%	2.68%	9.13%	3.408
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	11	9	0.1004	0.0028	0.0014	0.0034	0.0036	1.42%	3.34%	3.63%	1.086
241.99	Acid Soluble Fe, Other (0.1%)	9	9	0.1021	0.0087	0.0086	0.0021	0.0088	8.37%	2.10%	8.63%	4.106
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	11	10	0.0488	0.0041	0.0041	0.0005	0.0041	8.36%	1.12%	8.44%	7.520
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	9	8	0.0487	0.0021	0.0021	0.0008	0.0022	4.23%	1.68%	4.56%	2.708
261.99	Acid Soluble Mn, Other (0.05%)	11	11	0.0467	0.0037	0.0036	0.0012	0.0037	7.62%	2.50%	8.01%	3.210
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	21	18	0.0495	0.0016	0.0014	0.0011	0.0018	2.87%	2.31%	3.68%	1.594
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	11	10	0.0502	0.0011	0.0006	0.0014	0.0015	1.17%	2.78%	3.02%	1.085
321.99	Acid Soluble Zn, Other (0.05%)	10	9	0.0463	0.0099	0.0099	0.0006	0.0099	21.38%	1.32%	21.42%	16.28

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 # 200811

WS 20-20-20 w/micros

Lab Values

# Methods: 144

# Labs Reporting: 69

Issue Date : 09/30/2020

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 (%)	0309	2.735	0.0700	3.349	0.5162	0.1286	8	-1.09	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0444	3.000	0.1200	3.349	0.5162	0.1286	8	-0.62	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0563	3.158	0.0090	3.349	0.5162	0.1286	8	-0.34	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0230	3.160	0.0800	3.349	0.5162	0.1286	8	-0.33	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0136	3.200	0.0000	3.349	0.5162	0.1286	8	-0.26	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0498	3.690	0.3000	3.349	0.5162	0.1286	8	0.60	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0486	3.725	0.3500	3.349	0.5162	0.1286	8	0.67	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0117	4.750	0.1000	3.349	0.5162	0.1286	8	2.48	NA	0
001.99	Ammoniacal N, Other (%)	0368	2.596	0.0300	3.272	0.5457	0.0803	13	-1.24	NA	0
001.99	Ammoniacal N, Other (%)	0231	2.715	0.0100	3.272	0.5457	0.0803	13	-1.02	NA	0
001.99	Ammoniacal N, Other (%)	0096	2.890	0.0400	3.272	0.5457	0.0803	13	-0.70	NA	0
001.99	Ammoniacal N, Other (%)	0394	2.900	0.0750	3.272	0.5457	0.0803	13	-0.68	NA	0
001.99	Ammoniacal N, Other (%)	0524	3.013	0.0786	3.272	0.5457	0.0803	13	-0.47	NA	0
001.99	Ammoniacal N, Other (%)	0546	3.085	0.2700	3.272	0.5457	0.0803	13	-0.34	NA	0
001.99	Ammoniacal N, Other (%)	0300	3.110	0.0270	3.272	0.5457	0.0803	13	-0.30	NA	0
001.99	Ammoniacal N, Other (%)	0027	3.199	0.0630	3.272	0.5457	0.0803	13	-0.13	NA	0
001.99	Ammoniacal N, Other (%)	0529	3.585	0.2100	3.272	0.5457	0.0803	13	0.57	NA	0
001.99	Ammoniacal N, Other (%)	0220	3.640	0.0800	3.272	0.5457	0.0803	13	0.67	NA	0
001.99	Ammoniacal N, Other (%)	0405	3.815	0.0300	3.272	0.5457	0.0803	13	0.99	NA	0
001.99	Ammoniacal N, Other (%)	0538	3.900	0.1000	3.272	0.5457	0.0803	13	1.15	NA	0
001.99	Ammoniacal N, Other (%)	0255	4.115	0.0300	3.272	0.5457	0.0803	13	1.54	NA	0
002.20	Nitrate N, Jones Modified (%)	0230	9.735	0.7300				1			0
002.99	Nitrate N, Other (%)	0529	4.515	0.2100	6.576	0.9537	0.1089	10	-2.01	NA	0
002.99	Nitrate N, Other (%)	0368	5.773	0.0100	6.576	0.9537	0.1089	10	-0.78	NA	0
002.99	Nitrate N, Other (%)	0538	5.870	0.1400	6.576	0.9537	0.1089	10	-0.69	NA	0
002.99	Nitrate N, Other (%)	0136	6.400	0.4000	6.576	0.9537	0.1089	10	-0.17	NA	0
002.99	Nitrate N, Other (%)	0029	6.435	0.0500	6.576	0.9537	0.1089	10	-0.14	NA	0
002.99	Nitrate N, Other (%)	0486	6.640	0.0200	6.576	0.9537	0.1089	10	0.06	NA	0
002.99	Nitrate N, Other (%)	0394	7.025	0.0830	6.576	0.9537	0.1089	10	0.44	NA	0
002.99	Nitrate N, Other (%)	0444	7.180	0.0600	6.576	0.9537	0.1089	10	0.59	NA	0
002.99	Nitrate N, Other (%)	0027	7.288	0.1160	6.576	0.9537	0.1089	10	0.69	NA	0
002.99	Nitrate N, Other (%)	0220	8.750	0.0000	6.576	0.9537	0.1089	10	2.12	NA	0
005.00	Urea N, Urease (as N) (%)	0486	9.165	0.1100	10.05	1.261	0.2370	3	-0.71		0
005.00	Urea N, Urease (as N) (%)	0136	9.500	0.6000	10.05	1.261	0.2370	3	-0.44		0
005.00	Urea N, Urease (as N) (%)	0368	11.50	0.0010	10.05	1.261	0.2370	3	1.14		0
005.10	Urea N, HPLC(asN),H2Omobilephase (%)	0394	9.862	0.0540				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				
005.99	Urea N, Other (%)	0529	8.090	0.4000	10.00	1.346	0.3073	7	-1.29	NA	0
005.99	Urea N, Other (%)	0546	9.395	0.6900	10.00	1.346	0.3073	7	-0.41	NA	0
005.99	Urea N, Other (%)	0309	9.690	0.4800	10.00	1.346	0.3073	7	-0.21	NA	0
005.99	Urea N, Other (%)	0029	10.18	0.0200	10.00	1.346	0.3073	7	0.12	NA	0
005.99	Urea N, Other (%)	0538	10.30	0.2000	10.00	1.346	0.3073	7	0.20	NA	0
005.99	Urea N, Other (%)	0405	10.36	0.0900	10.00	1.346	0.3073	7	0.24	NA	0
005.99	Urea N, Other (%)	0027	12.53	0.2710	10.00	1.346	0.3073	7	1.69	NA	0
007.00	Urea, Urease (as Urea) (%)	0444	10.60	0.0400				1			0
007.99	Urea, Other (%)	0220	10.05	0.0700				1			0
009.10	Ammoniacal Plus Nitrate N, Devarda (%)	0444	10.18	0.0600				1			0
010.11	Total N, Modified Comprehensive (20%)	0105	4.330	0.2000	16.12	7.863	0.1525	4	-1.50		0
010.11	Total N, Modified Comprehensive (20%)	0309	19.73	0.1800	16.12	7.863	0.1525	4	0.46		0
010.11	Total N, Modified Comprehensive (20%)	0220	20.11	0.2200	16.12	7.863	0.1525	4	0.51		0
010.11	Total N, Modified Comprehensive (20%)	0546	20.31	0.0100	16.12	7.863	0.1525	4	0.53		0
010.12	Total N, Salicylic (20%)	0498	19.65	0.1000				2			0
010.12	Total N, Salicylic (20%)	0563	21.86	0.8760				2			0
010.16	Total N, Raney (20%)	0300	18.60	0.4590				1			0
010.60	Total N, Combustion (20%)	0035	18.00	0.2000	20.20	0.5328	0.2861	49	-4.13	Low	0
010.60	Total N, Combustion (20%)	0292	18.44	0.3900	20.20	0.5328	0.2861	49	-3.31	Low	0
010.60	Total N, Combustion (20%)	0523	19.20	0.0000	20.20	0.5328	0.2861	49	-1.87	Low	0
010.60	Total N, Combustion (20%)	0422	19.25	0.3000	20.20	0.5328	0.2861	49	-1.78	Low	0
010.60	Total N, Combustion (20%)	0073	19.35	0.0900	20.20	0.5328	0.2861	49	-1.60	Low	0
010.60	Total N, Combustion (20%)	0230	19.40	0.8000	20.20	0.5328	0.2861	49	-1.50	Low	0
010.60	Total N, Combustion (20%)	0034	19.66	0.0300	20.20	0.5328	0.2861	49	-1.02	OK	0
010.60	Total N, Combustion (20%)	0029	19.72	0.4500	20.20	0.5328	0.2861	49	-0.91	OK	0
010.60	Total N, Combustion (20%)	0486	19.72	0.0700	20.20	0.5328	0.2861	49	-0.91	OK	0
010.60	Total N, Combustion (20%)	0096	19.79	0.1200	20.20	0.5328	0.2861	49	-0.77	OK	0
010.60	Total N, Combustion (20%)	0040	19.80	0.2000	20.20	0.5328	0.2861	49	-0.75	OK	0
010.60	Total N, Combustion (20%)	0516	19.81	0.8200	20.20	0.5328	0.2861	49	-0.73	OK	0
010.60	Total N, Combustion (20%)	0356	19.81	0.1790	20.20	0.5328	0.2861	49	-0.73	OK	0
010.60	Total N, Combustion (20%)	0049	19.95	0.1900	20.20	0.5328	0.2861	49	-0.48	OK	0
010.60	Total N, Combustion (20%)	0043	19.97	0.0200	20.20	0.5328	0.2861	49	-0.43	OK	0
010.60	Total N, Combustion (20%)	0542	20.00	0.0850	20.20	0.5328	0.2861	49	-0.37	OK	0
010.60	Total N, Combustion (20%)	0136	20.00	0.2000	20.20	0.5328	0.2861	49	-0.37	OK	0
010.60	Total N, Combustion (20%)	0402	20.07	0.1130	20.20	0.5328	0.2861	49	-0.24	OK	0
010.60	Total N, Combustion (20%)	0389	20.10	0.3900	20.20	0.5328	0.2861	49	-0.19	OK	0
010.60	Total N, Combustion (20%)	0472	20.13	0.5800	20.20	0.5328	0.2861	49	-0.13	OK	0
010.60	Total N, Combustion (20%)	0055	20.14	0.3200	20.20	0.5328	0.2861	49	-0.11	OK	0
010.60	Total N, Combustion (20%)	0291	20.18	0.0100	20.20	0.5328	0.2861	49	-0.04	OK	0
010.60	Total N, Combustion (20%)	0325	20.20	0.0000	20.20	0.5328	0.2861	49	0.00	OK	0
010.60	Total N, Combustion (20%)	0231	20.22	0.0400	20.20	0.5328	0.2861	49	0.04	OK	0
010.60	Total N, Combustion (20%)	0368	20.23	0.0920	20.20	0.5328	0.2861	49	0.06	OK	0
010.60	Total N, Combustion (20%)	0451	20.26	0.6300	20.20	0.5328	0.2861	49	0.11	OK	0
010.60	Total N, Combustion (20%)	0095	20.27	0.8900	20.20	0.5328	0.2861	49	0.12	OK	0
010.60	Total N, Combustion (20%)	0234	20.30	0.0100	20.20	0.5328	0.2861	49	0.18	OK	0
010.60	Total N, Combustion (20%)	0324	20.30	0.2000	20.20	0.5328	0.2861	49	0.19	OK	0
010.60	Total N, Combustion (20%)	0037	20.30	0.5690	20.20	0.5328	0.2861	49	0.20	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total N, Combustion (20%)	0494	20.32	0.3300	20.20	0.5328	0.2861	49	0.22	OK	0
010.60	Total N, Combustion (20%)	0177	20.35	0.0700	20.20	0.5328	0.2861	49	0.27	OK	0
010.60	Total N, Combustion (20%)	0157	20.35	0.5000	20.20	0.5328	0.2861	49	0.28	OK	0
010.60	Total N, Combustion (20%)	0561	20.36	0.1800	20.20	0.5328	0.2861	49	0.30	OK	0
010.60	Total N, Combustion (20%)	0025	20.41	0.0200	20.20	0.5328	0.2861	49	0.40	OK	0
010.60	Total N, Combustion (20%)	0405	20.47	0.1700	20.20	0.5328	0.2861	49	0.50	OK	0
010.60	Total N, Combustion (20%)	0360	20.48	0.6500	20.20	0.5328	0.2861	49	0.52	OK	0
010.60	Total N, Combustion (20%)	0023	20.55	0.0000	20.20	0.5328	0.2861	49	0.66	OK	0
010.60	Total N, Combustion (20%)	0027	20.59	1.020	20.20	0.5328	0.2861	49	0.73	OK	0
010.60	Total N, Combustion (20%)	0354	20.60	0.2000	20.20	0.5328	0.2861	49	0.75	OK	0
010.60	Total N, Combustion (20%)	0527	20.67	0.1740	20.20	0.5328	0.2861	49	0.88	OK	0
010.60	Total N, Combustion (20%)	0390	20.74	0.6300	20.20	0.5328	0.2861	49	1.01	OK	0
010.60	Total N, Combustion (20%)	0444	20.78	0.1000	20.20	0.5328	0.2861	49	1.09	OK	0
010.60	Total N, Combustion (20%)	0450	20.90	0.2000	20.20	0.5328	0.2861	49	1.32	OK	0
010.60	Total N, Combustion (20%)	0547	20.94	0.0500	20.20	0.5328	0.2861	49	1.38	High	0
010.60	Total N, Combustion (20%)	0255	20.97	0.0690	20.20	0.5328	0.2861	49	1.44	High	0
010.60	Total N, Combustion (20%)	0377	21.20	1.100	20.20	0.5328	0.2861	49	1.88	High	0
010.60	Total N, Combustion (20%)	0169	21.73	0.0500	20.20	0.5328	0.2861	49	2.86	High	0
010.60	Total N, Combustion (20%)	0114	22.81	0.5200	20.20	0.5328	0.2861	49	4.90	High	0
010.60	Total N, Combustion (20%)	0041	19.54	1.810	20.20	0.5328	0.2861	49	-1.25	OK	1
010.99	Total N, Other (20%)	0529	16.19	0.0200	19.22	1.704	0.0798	5	-1.78		0
010.99	Total N, Other (20%)	0394	19.79	0.0620	19.22	1.704	0.0798	5	0.33		0
010.99	Total N, Other (20%)	0524	19.87	0.1669	19.22	1.704	0.0798	5	0.38		0
010.99	Total N, Other (20%)	0538	19.94	0.0900	19.22	1.704	0.0798	5	0.42		0
010.99	Total N, Other (20%)	0513	20.31	0.0600	19.22	1.704	0.0798	5	0.64		0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0444	14.71	0.1100				2			0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0114	14.81	0.0800				2			0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0231	14.50	0.0300	14.77	0.2120	0.0527	7	-1.18	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0292	14.63	0.0900	14.77	0.2120	0.0527	7	-0.63	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0300	14.75	0.0300	14.77	0.2120	0.0527	7	-0.12	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0356	14.77	0.0090	14.77	0.2120	0.0527	7	-0.01	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0405	14.83	0.0800	14.77	0.2120	0.0527	7	0.25	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0324	14.85	0.1000	14.77	0.2120	0.0527	7	0.33	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0561	15.10	0.0300	14.77	0.2120	0.0527	7	1.38	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0309	14.28	0.5400	14.77	0.2120	0.0527	7	-2.10	NA	1
020.40	Total P2O5, Automated (%)	0096	14.37	0.0500				2			0
020.40	Total P2O5, Automated (%)	0035	14.43	0.4400				2			0
020.50	Total P2O5, ICP (%)	0390	13.35	0.9000	14.79	1.048	0.2610	18	-1.37	NA	0
020.50	Total P2O5, ICP (%)	0389	13.44	0.0600	14.79	1.048	0.2610	18	-1.29	NA	0
020.50	Total P2O5, ICP (%)	0523	13.60	0.2000	14.79	1.048	0.2610	18	-1.13	NA	0
020.50	Total P2O5, ICP (%)	0472	13.69	0.0200	14.79	1.048	0.2610	18	-1.05	NA	0
020.50	Total P2O5, ICP (%)	0547	13.80	0.2000	14.79	1.048	0.2610	18	-0.94	NA	0
020.50	Total P2O5, ICP (%)	0552	14.16	0.4200	14.79	1.048	0.2610	18	-0.60	NA	0
020.50	Total P2O5, ICP (%)	0524	14.78	0.3795	14.79	1.048	0.2610	18	0.00	NA	0
020.50	Total P2O5, ICP (%)	0291	14.83	0.0100	14.79	1.048	0.2610	18	0.04	NA	0
020.50	Total P2O5, ICP (%)	0542	14.85	0.2800	14.79	1.048	0.2610	18	0.06	NA	0
020.50	Total P2O5, ICP (%)	0433	15.10	0.0900	14.79	1.048	0.2610	18	0.29	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				
020.50	Total P2O5, ICP (%)	0422	15.10	0.6000	14.79	1.048	0.2610	18	0.30	NA	0
020.50	Total P2O5, ICP (%)	0444	15.12	0.2400	14.79	1.048	0.2610	18	0.32	NA	0
020.50	Total P2O5, ICP (%)	0042	15.15	0.7000	14.79	1.048	0.2610	18	0.35	NA	0
020.50	Total P2O5, ICP (%)	0527	15.27	0.3311	14.79	1.048	0.2610	18	0.46	NA	0
020.50	Total P2O5, ICP (%)	0368	15.79	0.0880	14.79	1.048	0.2610	18	0.96	NA	0
020.50	Total P2O5, ICP (%)	0169	15.85	0.1000	14.79	1.048	0.2610	18	1.01	NA	0
020.50	Total P2O5, ICP (%)	0255	15.96	0.0530	14.79	1.048	0.2610	18	1.11	NA	0
020.50	Total P2O5, ICP (%)	0516	29.16	0.0270	14.79	1.048	0.2610	18	13.71	NA	0
020.50	Total P2O5, ICP (%)	0402	18.96	2.033	14.79	1.048	0.2610	18	3.98	NA	1
020.99	Total P2O5, Other (%)	0513	14.48	0.0500	16.44	3.205	0.5311	3	-0.61		0
020.99	Total P2O5, Other (%)	0529	14.70	0.0400	16.44	3.205	0.5311	3	-0.54		0
020.99	Total P2O5, Other (%)	0515	20.14	1.503	16.44	3.205	0.5311	3	1.15		0
030.20	Citrate Insoluble P2O5, Spectrophotometric MolybdovanadoP (%)	0405	0.0100	0.0000				1			0
030.40	Citrate Insoluble P2O5, Automated, test portion 963.03 A-B (%)	0096	0.0200	0.0000				1			0
040.20	Indirect Available P2O5, Spectrophotometric (20%)	0498	14.90	0.4000				1			0
040.40	Indirect Available P2O5, Automated (20%)	0096	14.35	0.0600				1			0
040.99	Indirect Available P2O5, Other (20%)	0405	14.82	0.0800				1			0
041.10	Direct Available P2O5, Gravimetric Quinolinium (20%)	0102	14.10	0.2000	14.45	0.2396	0.1777	4	-1.45		0
041.10	Direct Available P2O5, Gravimetric Quinolinium (20%)	0494	14.49	0.4500	14.45	0.2396	0.1777	4	0.16		0
041.10	Direct Available P2O5, Gravimetric Quinolinium (20%)	0049	14.56	0.0400	14.45	0.2396	0.1777	4	0.47		0
041.10	Direct Available P2O5, Gravimetric Quinolinium (20%)	0177	14.64	0.0208	14.45	0.2396	0.1777	4	0.81		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (20%)	0513	14.42	0.0600	15.04	0.5368	0.0480	5	-1.15		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (20%)	0220	14.65	0.0500	15.04	0.5368	0.0480	5	-0.73		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (20%)	0405	15.14	0.0600	15.04	0.5368	0.0480	5	0.19		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (20%)	0073	15.17	0.0600	15.04	0.5368	0.0480	5	0.25		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext.... (20%)	0055	15.81	0.0100	15.04	0.5368	0.0480	5	1.43		0
041.20	Direct Available P2O5, Spectrophotometric (20%)	0027	14.05	0.1640				2			0
041.20	Direct Available P2O5, Spectrophotometric (20%)	0300	14.73	0.0000				2			0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (20%)	0055	13.61	0.0700	14.75	0.7038	0.1568	7	-1.47	Low	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (20%)	0177	14.45	0.0295	14.75	0.7038	0.1568	7	-0.39	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (20%)	0472	14.69	0.3600	14.75	0.7038	0.1568	7	-0.08	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (20%)	0231	14.72	0.0300	14.75	0.7038	0.1568	7	-0.04	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (20%)	0394	14.84	0.1280	14.75	0.7038	0.1568	7	0.12	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (20%)	0405	15.05	0.0800	14.75	0.7038	0.1568	7	0.39	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (20%)	0354	16.20	0.4000	14.75	0.7038	0.1568	7	1.86	High	0
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (20%)	0095	13.02	0.4200	14.33	1.159	0.2633	3	-1.13		0
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (20%)	0029	14.72	0.2800	14.33	1.159	0.2633	3	0.34		0
041.40	Direct Available P2O5, Automated, Citrate-EDTA Ext. (20%)	0034	15.24	0.0900	14.33	1.159	0.2633	3	0.79		0
041.50	Direct Available P2O5, ICP (20%)	0368	14.69	0.1750				2			0
041.50	Direct Available P2O5, ICP (20%)	0325	16.35	0.1000				2			0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	0377	14.06	0.0100	14.67	0.4104	0.1722	9	-1.39	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	0023	14.45	0.1000	14.67	0.4104	0.1722	9	-0.50	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	0136	14.45	0.5000	14.67	0.4104	0.1722	9	-0.50	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	0040	14.55	0.3000	14.67	0.4104	0.1722	9	-0.28	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	0494	14.64	0.1200	14.67	0.4104	0.1722	9	-0.07	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	0043	14.73	0.0700	14.67	0.4104	0.1722	9	0.12	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	0117	14.83	0.2095	14.67	0.4104	0.1722	9	0.35	OK	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	0360	15.07	0.0500	14.67	0.4104	0.1722	9	0.88	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	0486	15.67	0.1900	14.67	0.4104	0.1722	9	2.23	High	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (20%)	0025	15.10	1.200	14.67	0.4104	0.1722	9	0.96	OK	1
041.99	Direct Available P2O5, Other (20%)	0538	19.98	0.2500				1			0
048.10	Water Soluble P2O5, Gravimetric Quinolinium (%)	0444	14.59	0.0600				1			0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0472	14.69	0.6200				2			0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0394	15.00	0.2560				2			0
048.40	Water Soluble P2O5, Automated (%)	0096	14.48	0.3900				1			0
048.50	Water Soluble P2O5, ICP (%)	0444	14.17	0.0400				2			0
048.50	Water Soluble P2O5, ICP (%)	0546	14.66	0.0850				2			0
048.99	Water Soluble P2O5, Other (%)	0513	14.46	0.0300				1			0
050.00	Soluble K2O, STPB Oxalate (20%)	0102	22.50	1.000	23.82	1.158	0.2911	9	-1.05	Low	0
050.00	Soluble K2O, STPB Oxalate (20%)	0049	22.70	0.0200	23.82	1.158	0.2911	9	-0.89	OK	0
050.00	Soluble K2O, STPB Oxalate (20%)	0231	23.42	0.0500	23.82	1.158	0.2911	9	-0.32	OK	0
050.00	Soluble K2O, STPB Oxalate (20%)	0114	23.49	0.1100	23.82	1.158	0.2911	9	-0.27	OK	0
050.00	Soluble K2O, STPB Oxalate (20%)	0561	23.55	0.2700	23.82	1.158	0.2911	9	-0.22	OK	0
050.00	Soluble K2O, STPB Oxalate (20%)	0494	23.76	0.5600	23.82	1.158	0.2911	9	-0.05	OK	0
050.00	Soluble K2O, STPB Oxalate (20%)	0220	24.25	0.0500	23.82	1.158	0.2911	9	0.34	OK	0
050.00	Soluble K2O, STPB Oxalate (20%)	0405	25.16	0.0600	23.82	1.158	0.2911	9	1.07	High	0
050.00	Soluble K2O, STPB Oxalate (20%)	0230	27.75	0.5000	23.82	1.158	0.2911	9	3.13	High	0
050.00	Soluble K2O, STPB Oxalate (20%)	0055	21.37	2.190	23.82	1.158	0.2911	9	-1.96	Low	1
050.30	Soluble K2O, AA (Oxalate) (20%)	0073	21.79	1.380	23.94	1.311	0.6574	5	-1.64		0
050.30	Soluble K2O, AA (Oxalate) (20%)	0157	23.90	1.000	23.94	1.311	0.6574	5	-0.03		0
050.30	Soluble K2O, AA (Oxalate) (20%)	0356	24.15	0.2670	23.94	1.311	0.6574	5	0.16		0
050.30	Soluble K2O, AA (Oxalate) (20%)	0040	24.60	0.2000	23.94	1.311	0.6574	5	0.50		0
050.30	Soluble K2O, AA (Oxalate) (20%)	0309	25.27	0.4400	23.94	1.311	0.6574	5	1.01		0
050.31	Soluble K2O, AA (Citrate) (20%)	0472	21.20	0.0000				2			0
050.31	Soluble K2O, AA (Citrate) (20%)	0498	21.95	0.5000				2			0
050.50	Soluble K2O, ICP (Oxalate) (20%)	0390	22.22	0.8400	24.00	1.635	0.3467	6	-0.97	Low	0
050.50	Soluble K2O, ICP (Oxalate) (20%)	0169	22.87	0.0700	24.00	1.635	0.3467	6	-0.62	OK	0
050.50	Soluble K2O, ICP (Oxalate) (20%)	0324	23.40	0.2000	24.00	1.635	0.3467	6	-0.33	OK	0
050.50	Soluble K2O, ICP (Oxalate) (20%)	0444	24.21	0.0400	24.00	1.635	0.3467	6	0.11	OK	0
050.50	Soluble K2O, ICP (Oxalate) (20%)	0292	25.46	0.0300	24.00	1.635	0.3467	6	0.79	High	0
050.50	Soluble K2O, ICP (Oxalate) (20%)	0422	25.85	0.9000	24.00	1.635	0.3467	6	1.01	High	0
050.51	Soluble K2O, ICP (Citrate) (20%)	0368	23.15	0.3380				2			0
050.51	Soluble K2O, ICP (Citrate) (20%)	0291	25.29	0.0100				2			0
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	0354	23.05	0.1000	23.65	0.5908	0.4855	10	-0.94	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	0494	23.22	0.7800	23.65	0.5908	0.4855	10	-0.68	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	0043	23.26	1.750	23.65	0.5908	0.4855	10	-0.62	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	0360	23.32	0.0300	23.65	0.5908	0.4855	10	-0.53	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	0025	23.50	0.6000	23.65	0.5908	0.4855	10	-0.24	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	0486	23.51	0.2200	23.65	0.5908	0.4855	10	-0.22	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	0377	23.56	0.2900	23.65	0.5908	0.4855	10	-0.15	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	0023	24.25	0.1000	23.65	0.5908	0.4855	10	0.94	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	0117	24.31	0.6854	23.65	0.5908	0.4855	10	1.04	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (20%)	0136	24.65	0.3000	23.65	0.5908	0.4855	10	1.57	OK	0
050.60	Soluble K2O, Flame Photometric (Oxalate) (20%)	0529	21.43	0.4800				2			0

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			Value	Range	Rob Mean	Rob SD	R-bar				
050.60	Soluble K2O, Flame Photometric (Oxalate) (20%)	0041	22.38	4.160				2			0
050.61	Soluble K2O, Flame Photometric (Citrate) (20%)	0035	24.42	1.670				1			0
050.62	Soluble K2O, Flame Photometric (Citrate-EDTA) (20%)	0513	22.92	0.0600	23.85	0.9616	0.8100	4	-0.97		0
050.62	Soluble K2O, Flame Photometric (Citrate-EDTA) (20%)	0095	23.61	1.100	23.85	0.9616	0.8100	4	-0.25		0
050.62	Soluble K2O, Flame Photometric (Citrate-EDTA) (20%)	0029	23.68	0.1000	23.85	0.9616	0.8100	4	-0.18		0
050.62	Soluble K2O, Flame Photometric (Citrate-EDTA) (20%)	0034	25.20	1.980	23.85	0.9616	0.8100	4	1.40		0
050.99	Soluble K2O, Other (20%)	0389	12.34	0.1500	23.28	2.968	0.3906	24	-3.69	Low	0
050.99	Soluble K2O, Other (20%)	0523	16.85	0.9000	23.28	2.968	0.3906	24	-2.17	Low	0
050.99	Soluble K2O, Other (20%)	0450	19.76	0.2800	23.28	2.968	0.3906	24	-1.19	Low	0
050.99	Soluble K2O, Other (20%)	0538	19.96	0.1200	23.28	2.968	0.3906	24	-1.12	Low	0
050.99	Soluble K2O, Other (20%)	0515	20.88	0.2725	23.28	2.968	0.3906	24	-0.81	Low	0
050.99	Soluble K2O, Other (20%)	0325	21.25	1.100	23.28	2.968	0.3906	24	-0.68	Low	0
050.99	Soluble K2O, Other (20%)	0547	21.34	0.3000	23.28	2.968	0.3906	24	-0.65	Low	0
050.99	Soluble K2O, Other (20%)	0371	21.35	0.6700	23.28	2.968	0.3906	24	-0.65	Low	0
050.99	Soluble K2O, Other (20%)	0255	22.82	0.3530	23.28	2.968	0.3906	24	-0.16	OK	0
050.99	Soluble K2O, Other (20%)	0552	22.90	0.2400	23.28	2.968	0.3906	24	-0.13	OK	0
050.99	Soluble K2O, Other (20%)	0394	22.95	0.0130	23.28	2.968	0.3906	24	-0.11	OK	0
050.99	Soluble K2O, Other (20%)	0524	23.06	0.2309	23.28	2.968	0.3906	24	-0.07	OK	0
050.99	Soluble K2O, Other (20%)	0300	23.73	0.7300	23.28	2.968	0.3906	24	0.15	OK	0
050.99	Soluble K2O, Other (20%)	0177	23.79	0.1551	23.28	2.968	0.3906	24	0.17	OK	0
050.99	Soluble K2O, Other (20%)	0433	24.38	0.1100	23.28	2.968	0.3906	24	0.37	OK	0
050.99	Soluble K2O, Other (20%)	0546	24.39	0.4660	23.28	2.968	0.3906	24	0.37	OK	0
050.99	Soluble K2O, Other (20%)	0234	24.50	0.5000	23.28	2.968	0.3906	24	0.41	High	0
050.99	Soluble K2O, Other (20%)	0563	24.99	0.6795	23.28	2.968	0.3906	24	0.57	High	0
050.99	Soluble K2O, Other (20%)	0042	25.10	0.2000	23.28	2.968	0.3906	24	0.61	High	0
050.99	Soluble K2O, Other (20%)	0527	25.53	0.2627	23.28	2.968	0.3906	24	0.76	High	0
050.99	Soluble K2O, Other (20%)	0027	25.77	0.3500	23.28	2.968	0.3906	24	0.84	High	0
050.99	Soluble K2O, Other (20%)	0542	27.35	0.7300	23.28	2.968	0.3906	24	1.37	High	0
050.99	Soluble K2O, Other (20%)	0402	27.57	0.2740	23.28	2.968	0.3906	24	1.44	High	0
050.99	Soluble K2O, Other (20%)	0516	31.90	0.2880	23.28	2.968	0.3906	24	2.90	High	0
050.99	Soluble K2O, Other (20%)	0096	23.37	2.100	23.28	2.968	0.3906	24	0.03	OK	1
060.00	Water (Free), Vacuum Oven (%)	0096	0.6950	0.0900				1			0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0096	0.0098	0.0024	0.0149	0.0087	0.0041	3	-0.59		0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0354	0.0100	0.0000	0.0149	0.0087	0.0041	3	-0.57		0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0472	0.0250	0.0100	0.0149	0.0087	0.0041	3	1.15		0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0527	< 0.001					0			5
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0563	< 0.01					0			5
101.99	Acid Soluble Ca, Other (%)	0552	1.135	1.730				1			0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0096	0.0100	0.0000				1			0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0354	< 0.01					1			5
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0494	0.0108	0.0006	0.0130	0.0022	0.0007	3	-0.99		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0527	0.0130	0.0005	0.0130	0.0022	0.0007	3	-0.02		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0563	0.0153	0.0011	0.0130	0.0022	0.0007	3	1.01		0
121.99	Acid Soluble Mg, Other (%)	0524	0.0085	0.0001	0.0886	0.1346	0.0818	5	-0.60		0
121.99	Acid Soluble Mg, Other (%)	0389	0.0095	0.0010	0.0886	0.1346	0.0818	5	-0.59		0
121.99	Acid Soluble Mg, Other (%)	0523	0.0100	0.0000	0.0886	0.1346	0.0818	5	-0.58		0
121.99	Acid Soluble Mg, Other (%)	0516	0.0950	0.0080	0.0886	0.1346	0.0818	5	0.05		0

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			Value	Range	Rob Mean	Rob SD	R-bar				
121.99	Acid Soluble Mg, Other (%)	0552	0.3200	0.4000	0.0886	0.1346	0.0818	5	1.72		0
143.99	Elemental S, Other (%)	0472	0.0400	0.0000				2			0
143.99	Elemental S, Other (%)	0389	0.0550	0.0100				2			0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0494	0.0459	0.0085				2			0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0515	0.0527	0.0052				2			0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0527	< 0.01					2			5
148.07	Total S, ICP, test portion as in 2017.02 (%)	0563	< 0.03					2			5
148.99	Total S, Other (%)	0523	0.0500	0.0000	0.0706	0.0339	0.0053	4	-0.61		0
148.99	Total S, Other (%)	0096	0.0515	0.0030	0.0706	0.0339	0.0053	4	-0.56		0
148.99	Total S, Other (%)	0354	0.0600	0.0000	0.0706	0.0339	0.0053	4	-0.31		0
148.99	Total S, Other (%)	0516	0.1210	0.0180	0.0706	0.0339	0.0053	4	1.49		0
149.04	S - HNO3 soluble, ICP (%)	0524	0.0503	0.0027				1			0
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid (ppm)	0498	< 0.2					0			5
151.30	Acid Soluble As, ICP (ppm)	0523	0.0950	0.0000	0.1359	0.0484	0.0108	4	-0.84		0
151.30	Acid Soluble As, ICP (ppm)	0450	0.1000	0.0000	0.1359	0.0484	0.0108	4	-0.74		0
151.30	Acid Soluble As, ICP (ppm)	0255	0.1505	0.0030	0.1359	0.0484	0.0108	4	0.30		0
151.30	Acid Soluble As, ICP (ppm)	0524	0.1980	0.0400	0.1359	0.0484	0.0108	4	1.28		0
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	0529	0.1050	0.0100				1			0
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	0300	< 2					1			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0563	0.2397	0.0118				1			0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0515	0.0000	0.0000				1			4
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0527	< 0.0001					1			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0136	< 0.5					1			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0494	< 1.42					1			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0117	< 10					1			5
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0368	< 0.4					0			5
151.99	Acid Soluble As, Other (ppm)	0220	0.6500	0.1000				1			0
151.99	Acid Soluble As, Other (ppm)	0405	< 1					1			5
165.00	Acid Soluble B, Spectrophotometric (0.02%)	0498	0.0200	0.0000	0.0295	0.0140	0.0050	4	-0.68		0
165.00	Acid Soluble B, Spectrophotometric (0.02%)	0029	0.0210	0.0000	0.0295	0.0140	0.0050	4	-0.61		0
165.00	Acid Soluble B, Spectrophotometric (0.02%)	0220	0.0270	0.0000	0.0295	0.0140	0.0050	4	-0.18		0
165.00	Acid Soluble B, Spectrophotometric (0.02%)	0309	0.0500	0.0200	0.0295	0.0140	0.0050	4	1.46		0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0234	0.0100	0.0000	0.0185	0.0025	0.0002	12	-3.36	Low	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0529	0.0100	0.0000	0.0185	0.0025	0.0002	12	-3.36	Low	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0169	0.0165	0.0010	0.0185	0.0025	0.0002	12	-0.79	OK	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0043	0.0175	0.0010	0.0185	0.0025	0.0002	12	-0.40	OK	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0377	0.0186	0.0001	0.0185	0.0025	0.0002	12	0.02	OK	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0324	0.0190	0.0004	0.0185	0.0025	0.0002	12	0.20	OK	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0444	0.0190	0.0000	0.0185	0.0025	0.0002	12	0.20	OK	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0102	0.0200	0.0000	0.0185	0.0025	0.0002	12	0.59	OK	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0354	0.0200	0.0000	0.0185	0.0025	0.0002	12	0.59	OK	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0371	0.0200	0.0000	0.0185	0.0025	0.0002	12	0.59	OK	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0433	0.0204	0.0000	0.0185	0.0025	0.0002	12	0.75	OK	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0402	0.0217	0.0004	0.0185	0.0025	0.0002	12	1.26	OK	0
165.30	Acid Soluble B, ICP, test portion in 982.01 (0.02%)	0394	0.0210	0.0020	0.0185	0.0025	0.0002	12	0.98	OK	1
165.99	Acid Soluble B, Other (0.02%)	0515	0.0111	0.0037	0.0199	0.0024	0.0015	15	-3.65	Low	0



Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
165.99	Acid Soluble B, Other (0.02%)	0524	0.0166	0.0003	0.0199	0.0024	0.0015	15	-1.38	OK	0
165.99	Acid Soluble B, Other (0.02%)	0527	0.0176	0.0004	0.0199	0.0024	0.0015	15	-0.95	OK	0
165.99	Acid Soluble B, Other (0.02%)	0486	0.0185	0.0010	0.0199	0.0024	0.0015	15	-0.58	OK	0
165.99	Acid Soluble B, Other (0.02%)	0117	0.0187	0.0001	0.0199	0.0024	0.0015	15	-0.52	OK	0
165.99	Acid Soluble B, Other (0.02%)	0360	0.0195	0.0010	0.0199	0.0024	0.0015	15	-0.17	OK	0
165.99	Acid Soluble B, Other (0.02%)	0231	0.0200	0.0000	0.0199	0.0024	0.0015	15	0.04	OK	0
165.99	Acid Soluble B, Other (0.02%)	0300	0.0200	0.0000	0.0199	0.0024	0.0015	15	0.04	OK	0
165.99	Acid Soluble B, Other (0.02%)	0472	0.0200	0.0000	0.0199	0.0024	0.0015	15	0.04	OK	0
165.99	Acid Soluble B, Other (0.02%)	0368	0.0204	0.0001	0.0199	0.0024	0.0015	15	0.18	OK	0
165.99	Acid Soluble B, Other (0.02%)	0390	0.0213	0.0056	0.0199	0.0024	0.0015	15	0.57	OK	0
165.99	Acid Soluble B, Other (0.02%)	0042	0.0215	0.0030	0.0199	0.0024	0.0015	15	0.66	OK	0
165.99	Acid Soluble B, Other (0.02%)	0255	0.0220	0.0020	0.0199	0.0024	0.0015	15	0.86	OK	0
165.99	Acid Soluble B, Other (0.02%)	0563	0.0228	0.0000	0.0199	0.0024	0.0015	15	1.19	OK	0
165.99	Acid Soluble B, Other (0.02%)	0516	0.1210	0.0060	0.0199	0.0024	0.0015	15	41.62	High	0
165.99	Acid Soluble B, Other (0.02%)	0552	0.0450	0.0900	0.0199	0.0024	0.0015	15			4
171.10	Water Soluble B, Spectrophotometric (%)	0538	0.0195	0.0030				1			0
171.99	Water Soluble B, Other (%)	0546	0.0185	0.0009				2			0
171.99	Water Soluble B, Other (%)	0027	0.0200	0.0000				2			0
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	0498	< 0.1					0			5
181.30	Acid Soluble Cd, ICP (ppm)	0523	0.0020	0.0000	0.0114	0.0083	0.0037	4	-1.13		0
181.30	Acid Soluble Cd, ICP (ppm)	0255	0.0070	0.0060	0.0114	0.0083	0.0037	4	-0.52		0
181.30	Acid Soluble Cd, ICP (ppm)	0524	0.0164	0.0086	0.0114	0.0083	0.0037	4	0.61		0
181.30	Acid Soluble Cd, ICP (ppm)	0389	0.0200	0.0000	0.0114	0.0083	0.0037	4	1.04		0
181.30	Acid Soluble Cd, ICP (ppm)	0394	< 0.14		0.0114	0.0083	0.0037	4			5
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	0529	0.0300	0.0000				1			0
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	0300	< 0.5					1			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0563	0.0224	0.0042				1			0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0515	0.0000	0.0000				1			4
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0527	< 0.0001					1			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0136	< 0.5					1			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0117	< 5					1			5
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	0368	< 0.1					0			5
181.99	Acid Soluble Cd, Other (ppm)	0405	< 0.01					0			5
181.99	Acid Soluble Cd, Other (ppm)	0220	< 0.1					0			5
191.30	Acid Soluble Cr, ICP (ppm)	0523	0.3280	0.0000	1.326	0.7307	0.0409	6	-1.22	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0450	1.000	0.0000	1.326	0.7307	0.0409	6	-0.40	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0524	1.110	0.0255	1.326	0.7307	0.0409	6	-0.26	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0444	1.600	0.1600	1.326	0.7307	0.0409	6	0.33	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0394	1.805	0.0300	1.326	0.7307	0.0409	6	0.58	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0389	2.115	0.0300	1.326	0.7307	0.0409	6	0.96	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0035	2.165	0.5700	1.326	0.7307	0.0409	6	1.02	NA	1
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	0529	0.2750	0.0900				1			0
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	0300	< 5					1			5
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0563	0.2690	0.0060	5.559	8.927	4.040	3	-0.59		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0527	0.5423	0.0245	5.559	8.927	4.040	3	-0.56		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0515	15.87	12.09	5.559	8.927	4.040	3	1.15		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				
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0368	0.1510	0.0540				2			0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0515	1.664	1.548				2			0
191.99	Acid Soluble Cr, Other (ppm)	0220	1.900	0.2000				1			0
191.99	Acid Soluble Cr, Other (ppm)	0405	< 1					1			5
202.30	Acid Soluble Co, ICP (ppm)	0389	0.3000	0.0000	0.3467	0.0800	0.0590	3	-0.58		0
202.30	Acid Soluble Co, ICP (ppm)	0523	0.3010	0.0000	0.3467	0.0800	0.0590	3	-0.57		0
202.30	Acid Soluble Co, ICP (ppm)	0524	0.4390	0.1770	0.3467	0.0800	0.0590	3	1.15		0
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0529	0.2000	0.0200				1			0
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0300	< 1					1			5
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0546	0.2018	0.2195	0.2980	0.0846	0.0869	3	-0.92		0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0527	0.3316	0.0212	0.2980	0.0846	0.0869	3	0.32		0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0563	0.3605	0.0200	0.2980	0.0846	0.0869	3	0.60		0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0515	0.0000	0.0000	0.2980	0.0846	0.0869	3			4
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0494	< 0.7		0.2980	0.0846	0.0869	3			5
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0136	< 3		0.2980	0.0846	0.0869	3			5
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0368	2.360	0.0820				1			0
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				1			4
202.99	Acid Soluble Co, Other (ppm)	0220	0.1150	0.0100	0.2588	0.1425	0.0063	3	-1.01		0
202.99	Acid Soluble Co, Other (ppm)	0255	0.2615	0.0090	0.2588	0.1425	0.0063	3	0.02		0
202.99	Acid Soluble Co, Other (ppm)	0405	0.4000	0.0000	0.2588	0.1425	0.0063	3	0.99		0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (0.05%)	0538	0.0495	0.0030	0.0504	0.0014	0.0013	3	-0.65		0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (0.05%)	0040	0.0497	0.0002	0.0504	0.0014	0.0013	3	-0.50		0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (0.05%)	0029	0.0520	0.0006	0.0504	0.0014	0.0013	3	1.15		0
221.01	Acid Soluble Cu, AA, organic 965.09 (0.05%)	0498	0.0420	0.0000				1			0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0023	0.0400	0.0000	0.0495	0.0052	0.0014	18	-1.83	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0035	0.0440	0.0020	0.0495	0.0052	0.0014	18	-1.06	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0095	0.0448	0.0049	0.0495	0.0052	0.0014	18	-0.91	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0157	0.0450	0.0040	0.0495	0.0052	0.0014	18	-0.86	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0433	0.0456	0.0009	0.0495	0.0052	0.0014	18	-0.76	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0324	0.0461	0.0011	0.0495	0.0052	0.0014	18	-0.66	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0377	0.0480	0.0002	0.0495	0.0052	0.0014	18	-0.29	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0360	0.0490	0.0000	0.0495	0.0052	0.0014	18	-0.09	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0102	0.0500	0.0000	0.0495	0.0052	0.0014	18	0.10	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0231	0.0500	0.0000	0.0495	0.0052	0.0014	18	0.10	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0354	0.0500	0.0000	0.0495	0.0052	0.0014	18	0.10	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0444	0.0500	0.0000	0.0495	0.0052	0.0014	18	0.10	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0472	0.0500	0.0000	0.0495	0.0052	0.0014	18	0.10	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0096	0.0517	0.0002	0.0495	0.0052	0.0014	18	0.43	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0234	0.0550	0.0100	0.0495	0.0052	0.0014	18	1.06	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0402	0.0558	0.0003	0.0495	0.0052	0.0014	18	1.21	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0255	0.0570	0.0020	0.0495	0.0052	0.0014	18	1.45	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0371	0.0600	0.0000	0.0495	0.0052	0.0014	18	2.02	High	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.05%)	0552	0.0900	0.0400	0.0495	0.0052	0.0014	18	7.80	High	1
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (0.05%)	0300	0.0450	0.0000	0.0477	0.0024	0.0004	4	-1.12		0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (0.05%)	0394	0.0464	0.0005	0.0477	0.0024	0.0004	4	-0.56		0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (0.05%)	0220	0.0495	0.0010	0.0477	0.0024	0.0004	4	0.74		0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (0.05%)	0529	0.0500	0.0000	0.0477	0.0024	0.0004	4	0.94		0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	0486	0.0460	0.0020	0.0495	0.0027	0.0024	9	-1.20	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	0494	0.0464	0.0046	0.0495	0.0027	0.0024	9	-1.06	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	0527	0.0487	0.0007	0.0495	0.0027	0.0024	9	-0.30	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	0546	0.0492	0.0010	0.0495	0.0027	0.0024	9	-0.11	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	0037	0.0500	0.0020	0.0495	0.0027	0.0024	9	0.16	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	0043	0.0500	0.0020	0.0495	0.0027	0.0024	9	0.16	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	0136	0.0500	0.0000	0.0495	0.0027	0.0024	9	0.16	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	0563	0.0519	0.0011	0.0495	0.0027	0.0024	9	0.79	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.05%)	0117	0.0551	0.0079	0.0495	0.0027	0.0024	9	1.89	OK	0
221.99	Acid Soluble Cu, Other (0.05%)	0389	0.0400	0.0000	0.0480	0.0056	0.0031	10	-1.31	OK	0
221.99	Acid Soluble Cu, Other (0.05%)	0390	0.0411	0.0140	0.0480	0.0056	0.0031	10	-1.13	OK	0
221.99	Acid Soluble Cu, Other (0.05%)	0524	0.0454	0.0013	0.0480	0.0056	0.0031	10	-0.43	OK	0
221.99	Acid Soluble Cu, Other (0.05%)	0405	0.0477	0.0015	0.0480	0.0056	0.0031	10	-0.05	OK	0
221.99	Acid Soluble Cu, Other (0.05%)	0523	0.0480	0.0000	0.0480	0.0056	0.0031	10	0.00	OK	0
221.99	Acid Soluble Cu, Other (0.05%)	0220	0.0483	0.0002	0.0480	0.0056	0.0031	10	0.05	OK	0
221.99	Acid Soluble Cu, Other (0.05%)	0368	0.0499	0.0026	0.0480	0.0056	0.0031	10	0.32	OK	0
221.99	Acid Soluble Cu, Other (0.05%)	0042	0.0500	0.0000	0.0480	0.0056	0.0031	10	0.33	OK	0
221.99	Acid Soluble Cu, Other (0.05%)	0027	0.0530	0.0020	0.0480	0.0056	0.0031	10	0.83	OK	0
221.99	Acid Soluble Cu, Other (0.05%)	0516	0.1085	0.0090	0.0480	0.0056	0.0031	10	9.98	High	0
221.99	Acid Soluble Cu, Other (0.05%)	0515	0.0651	0.0251	0.0480	0.0056	0.0031	10	2.82	High	1
241.00	Acid Soluble Fe, AA, inorganic 965.09 (0.1%)	0356	0.1010	0.0020	0.2161	0.2196	0.2247	4	-0.52		0
241.00	Acid Soluble Fe, AA, inorganic 965.09 (0.1%)	0029	0.1080	0.0076	0.2161	0.2196	0.2247	4	-0.49		0
241.00	Acid Soluble Fe, AA, inorganic 965.09 (0.1%)	0040	0.1100	0.0000	0.2161	0.2196	0.2247	4	-0.48		0
241.00	Acid Soluble Fe, AA, inorganic 965.09 (0.1%)	0538	0.5455	0.8890	0.2161	0.2196	0.2247	4	1.50		0
241.01	Acid Soluble Fe, AA, organic 965.09 (0.1%)	0498	0.0635	0.0010				1			0
241.03	Acid Soluble Fe, AA, 965.09, test portion 2006.03A-C w/dual acid ... (0.1%)	0220	0.1110	0.0020				1			0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0035	0.0860	0.0040	0.1010	0.0099	0.0028	19	-1.52	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0023	0.0900	0.0000	0.1010	0.0099	0.0028	19	-1.11	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0095	0.0902	0.0081	0.1010	0.0099	0.0028	19	-1.10	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0157	0.0910	0.0140	0.1010	0.0099	0.0028	19	-1.01	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0354	0.0950	0.0100	0.1010	0.0099	0.0028	19	-0.61	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0390	0.0964	0.0001	0.1010	0.0099	0.0028	19	-0.47	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0096	0.1000	0.0000	0.1010	0.0099	0.0028	19	-0.10	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0102	0.1000	0.0000	0.1010	0.0099	0.0028	19	-0.10	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0231	0.1000	0.0000	0.1010	0.0099	0.0028	19	-0.10	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0371	0.1000	0.0000	0.1010	0.0099	0.0028	19	-0.10	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0472	0.1000	0.0000	0.1010	0.0099	0.0028	19	-0.10	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0324	0.1005	0.0010	0.1010	0.0099	0.0028	19	-0.05	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0255	0.1020	0.0020	0.1010	0.0099	0.0028	19	0.10	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0360	0.1035	0.0030	0.1010	0.0099	0.0028	19	0.25	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0234	0.1100	0.0000	0.1010	0.0099	0.0028	19	0.91	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0444	0.1100	0.0000	0.1010	0.0099	0.0028	19	0.91	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0433	0.1131	0.0013	0.1010	0.0099	0.0028	19	1.22	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0402	0.1155	0.0017	0.1010	0.0099	0.0028	19	1.46	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0377	0.1201	0.0082	0.1010	0.0099	0.0028	19	1.94	High	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (0.1%)	0552	0.2900	0.1400	0.1010	0.0099	0.0028	19	19.15	High	2
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (0.1%)	0300	0.0895	0.0010				2			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (0.1%)	0394	0.0923	0.0009				2			0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0177	0.0966	0.0063	0.1010	0.0037	0.0160	10	-1.11	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0546	0.0969	0.0009	0.1010	0.0037	0.0160	10	-1.04	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0043	0.0985	0.0010	0.1010	0.0037	0.0160	10	-0.62	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0055	0.1000	0.0000	0.1010	0.0037	0.0160	10	-0.24	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0037	0.1005	0.0090	0.1010	0.0037	0.0160	10	-0.12	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0563	0.1005	0.0068	0.1010	0.0037	0.0160	10	-0.12	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0494	0.1023	0.0030	0.1010	0.0037	0.0160	10	0.34	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0486	0.1035	0.0030	0.1010	0.0037	0.0160	10	0.64	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0527	0.1045	0.0040	0.1010	0.0037	0.0160	10	0.89	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0515	0.1677	0.1259	0.1010	0.0037	0.0160	10	16.81	High	0
241.33	Acid Soluble Fe, ICP, 2017.02 (0.1%)	0117	0.5371	0.8822	0.1010	0.0037	0.0160	10	109.94	High	1
241.99	Acid Soluble Fe, Other (0.1%)	0389	0.0900	0.0000	0.1014	0.0081	0.0021	9	-1.30	OK	0
241.99	Acid Soluble Fe, Other (0.1%)	0524	0.0921	0.0021	0.1014	0.0081	0.0021	9	-1.06	OK	0
241.99	Acid Soluble Fe, Other (0.1%)	0405	0.1000	0.0000	0.1014	0.0081	0.0021	9	-0.16	OK	0
241.99	Acid Soluble Fe, Other (0.1%)	0523	0.1005	0.0010	0.1014	0.0081	0.0021	9	-0.10	OK	0
241.99	Acid Soluble Fe, Other (0.1%)	0368	0.1015	0.0066	0.1014	0.0081	0.0021	9	0.01	OK	0
241.99	Acid Soluble Fe, Other (0.1%)	0516	0.1040	0.0020	0.1014	0.0081	0.0021	9	0.29	OK	0
241.99	Acid Soluble Fe, Other (0.1%)	0515	0.1052	0.0051	0.1014	0.0081	0.0021	9	0.42	OK	0
241.99	Acid Soluble Fe, Other (0.1%)	0027	0.1060	0.0020	0.1014	0.0081	0.0021	9	0.52	OK	0
241.99	Acid Soluble Fe, Other (0.1%)	0042	0.1200	0.0000	0.1014	0.0081	0.0021	9	2.11	High	0
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	0498	< 0.5					0			5
251.30	Acid Soluble Pb, ICP (ppm)	0523	0.0190	0.0000				2			0
251.30	Acid Soluble Pb, ICP (ppm)	0524	0.0509	0.0217				2			0
251.30	Acid Soluble Pb, ICP (ppm)	0255	0.0000	0.0000				2			4
251.30	Acid Soluble Pb, ICP (ppm)	0450	0.1500	0.3000				2			4
251.30	Acid Soluble Pb, ICP (ppm)	0394	< 0.68					2			5
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	0529	0.0950	0.0100				1			0
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	0300	< 5					1			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0515	0.0000	0.0000				0			4
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0527	< 0.0001					0			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0563	< 0.01					0			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0136	< 0.5					0			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0117	< 5					0			5
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0368	< 0.7					0			5
251.99	Acid Soluble Pb, Other (ppm)	0405	< 0.2					0			5
251.99	Acid Soluble Pb, Other (ppm)	0220	< 1					0			5
261.12	Acid Soluble Mn, AA, inorganic 965.09 (0.05%)	0538	0.0500	0.0020	0.0510	0.0010	0.0032	3	-0.99		0
261.12	Acid Soluble Mn, AA, inorganic 965.09 (0.05%)	0040	0.0510	0.0020	0.0510	0.0010	0.0032	3	-0.02		0
261.12	Acid Soluble Mn, AA, inorganic 965.09 (0.05%)	0029	0.0521	0.0055	0.0510	0.0010	0.0032	3	1.01		0
261.13	Acid Soluble Mn, AA, organic 965.09 (0.05%)	0498	0.0305	0.0010				1			0
261.14	Acid Soluble Mn, AA, 965.09, test portion 2006.03A-C (0.05%)	0529	0.0500	0.0000				1			0
261.15	Acid Soluble Mn, AA, 965.09, test portion 2006.03A-C w/dual acid ... (0.05%)	0220	0.0515	0.0010				1			0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0354	0.0400	0.0000	0.0490	0.0029	0.0005	10	-2.85	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0035	0.0455	0.0010	0.0490	0.0029	0.0005	10	-1.10	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0096	0.0473	0.0015	0.0490	0.0029	0.0005	10	-0.54	OK	0



Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0390	0.0489	0.0000	0.0490	0.0029	0.0005	10	-0.02	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0433	0.0491	0.0007	0.0490	0.0029	0.0005	10	0.03	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0102	0.0500	0.0000	0.0490	0.0029	0.0005	10	0.33	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0234	0.0500	0.0000	0.0490	0.0029	0.0005	10	0.33	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0472	0.0500	0.0000	0.0490	0.0029	0.0005	10	0.33	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0444	0.0510	0.0000	0.0490	0.0029	0.0005	10	0.65	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0402	0.0560	0.0015	0.0490	0.0029	0.0005	10	2.22	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (0.05%)	0157	0.0420	0.0040	0.0490	0.0029	0.0005	10	-2.21	OK	1
261.31	Acid Soluble Mn, ICP, test portion 972.02b (0.05%)	0324	0.0475	0.0017				2			0
261.31	Acid Soluble Mn, ICP, test portion 972.02b (0.05%)	0360	0.0500	0.0000				2			0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (0.05%)	0023	0.0400	0.0000	0.0465	0.0041	0.0003	5	-1.38		0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (0.05%)	0300	0.0460	0.0000	0.0465	0.0041	0.0003	5	-0.10		0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (0.05%)	0377	0.0463	0.0015	0.0465	0.0041	0.0003	5	-0.04		0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (0.05%)	0231	0.0500	0.0000	0.0465	0.0041	0.0003	5	0.76		0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (0.05%)	0371	0.0500	0.0000	0.0465	0.0041	0.0003	5	0.76		0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (0.05%)	0552	0.1650	0.2300	0.0465	0.0041	0.0003	5	25.27		1
261.34	Acid Soluble Mn, ICP, test portion 2006.03A-C (0.05%)	0394	0.0380	0.0009				1			0
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	0043	0.0450	0.0000	0.0490	0.0023	0.0012	9	-1.62	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	0546	0.0471	0.0017	0.0490	0.0023	0.0012	9	-0.79	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	0117	0.0482	0.0004	0.0490	0.0023	0.0012	9	-0.33	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	0527	0.0485	0.0003	0.0490	0.0023	0.0012	9	-0.22	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	0486	0.0490	0.0020	0.0490	0.0023	0.0012	9	0.00	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	0494	0.0495	0.0006	0.0490	0.0023	0.0012	9	0.20	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	0055	0.0500	0.0000	0.0490	0.0023	0.0012	9	0.40	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	0037	0.0510	0.0040	0.0490	0.0023	0.0012	9	0.80	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (0.05%)	0563	0.0523	0.0018	0.0490	0.0023	0.0012	9	1.33	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0389	0.0400	0.0000	0.0468	0.0040	0.0012	11	-1.60	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0042	0.0430	0.0000	0.0468	0.0040	0.0012	11	-0.89	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0095	0.0439	0.0027	0.0468	0.0040	0.0012	11	-0.69	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0524	0.0442	0.0016	0.0468	0.0040	0.0012	11	-0.61	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0255	0.0450	0.0020	0.0468	0.0040	0.0012	11	-0.42	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0405	0.0481	0.0022	0.0468	0.0040	0.0012	11	0.31	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0368	0.0491	0.0009	0.0468	0.0040	0.0012	11	0.53	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0515	0.0492	0.0012	0.0468	0.0040	0.0012	11	0.57	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0027	0.0500	0.0000	0.0468	0.0040	0.0012	11	0.75	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0523	0.0505	0.0030	0.0468	0.0040	0.0012	11	0.87	OK	0
261.99	Acid Soluble Mn, Other (0.05%)	0516	0.0510	0.0000	0.0468	0.0040	0.0012	11	0.99	OK	0
271.00	Water Soluble Mn, AA (%)	0356	0.0510	0.0040				1			0
281.30	Acid Soluble Hg, ICP (ppm)	0515	0.0000	0.0000				0			4
281.30	Acid Soluble Hg, ICP (ppm)	0450	0.0100	0.0200				0			4
281.30	Acid Soluble Hg, ICP (ppm)	0527	< 0.001					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0563	< 0.01					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0529	< 0.02					0			5
281.99	Acid Soluble Hg, Other (ppm)	0220	0.0290	0.0020				1			0
281.99	Acid Soluble Hg, Other (ppm)	0368	< 0.01					1			5
281.99	Acid Soluble Hg, Other (ppm)	0405	< 0.01					1			5
281.99	Acid Soluble Hg, Other (ppm)	0300	< 0.05					1			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				
289.30	Acid Soluble Mo, ICP (5ppm)	0255	1.762	0.0090	4.796	2.238	0.7637	7	-1.23	Low	0
289.30	Acid Soluble Mo, ICP (5ppm)	0524	3.067	0.9368	4.796	2.238	0.7637	7	-0.70	OK	0
289.30	Acid Soluble Mo, ICP (5ppm)	0234	4.500	1.000	4.796	2.238	0.7637	7	-0.12	OK	0
289.30	Acid Soluble Mo, ICP (5ppm)	0096	4.850	1.500	4.796	2.238	0.7637	7	0.02	OK	0
289.30	Acid Soluble Mo, ICP (5ppm)	0444	5.190	0.5000	4.796	2.238	0.7637	7	0.16	OK	0
289.30	Acid Soluble Mo, ICP (5ppm)	0102	6.700	0.4000	4.796	2.238	0.7637	7	0.77	OK	0
289.30	Acid Soluble Mo, ICP (5ppm)	0516	7.500	1.000	4.796	2.238	0.7637	7	1.09	High	0
289.30	Acid Soluble Mo, ICP (5ppm)	0402	5.600	8.400	4.796	2.238	0.7637	7	0.32	OK	1
289.30	Acid Soluble Mo, ICP (5ppm)	0027	< 10		4.796	2.238	0.7637	7			5
289.32	Acid Soluble Mo, ICP, 2006.03 (5ppm)	0529	2.290	0.0600	4.230	2.768	0.7533	3	-0.70		0
289.32	Acid Soluble Mo, ICP, 2006.03 (5ppm)	0394	3.000	2.000	4.230	2.768	0.7533	3	-0.44		0
289.32	Acid Soluble Mo, ICP, 2006.03 (5ppm)	0220	7.400	0.2000	4.230	2.768	0.7533	3	1.15		0
289.33	Acid Soluble Mo, ICP, 2017.02 (5ppm)	0563	2.534	0.2424	4.327	1.442	0.8774	6	-1.11	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (5ppm)	0494	3.013	0.8750	4.327	1.442	0.8774	6	-0.81	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (5ppm)	0515	4.432	2.195	4.327	1.442	0.8774	6	0.06	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (5ppm)	0117	5.083	1.353	4.327	1.442	0.8774	6	0.47	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (5ppm)	0527	5.330	0.5990	4.327	1.442	0.8774	6	0.62	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (5ppm)	0546	5.575	0.0000	4.327	1.442	0.8774	6	0.77	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (5ppm)	0136	< 3		4.327	1.442	0.8774	6			5
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (5ppm)	0368	5.250	0.5000				2			0
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (5ppm)	0515	8.598	9.200				2			0
289.99	Acid Soluble Mo, Other (5ppm)	0405	2.720	0.2600				2			0
289.99	Acid Soluble Mo, Other (5ppm)	0220	5.950	0.1000				2			0
291.30	Acid Soluble Ni, ICP (ppm)	0524	0.0564	0.0364	0.5791	0.6253	0.0313	5	-0.73		0
291.30	Acid Soluble Ni, ICP (ppm)	0389	0.1200	0.0000	0.5791	0.6253	0.0313	5	-0.64		0
291.30	Acid Soluble Ni, ICP (ppm)	0523	0.2490	0.0000	0.5791	0.6253	0.0313	5	-0.46		0
291.30	Acid Soluble Ni, ICP (ppm)	0450	1.000	0.0000	0.5791	0.6253	0.0313	5	0.59		0
291.30	Acid Soluble Ni, ICP (ppm)	0444	1.470	0.1200	0.5791	0.6253	0.0313	5	1.24		0
291.30	Acid Soluble Ni, ICP (ppm)	0394	< 0.39		0.5791	0.6253	0.0313	5			5
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	0529	0.3450	0.0700				1			0
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	0300	< 5					1			5
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0563	0.1683	0.0090				2			0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0527	0.2424	0.0265				2			0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0117	< 5					2			5
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0515	1.348	1.155				2			0
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0368	1.497	0.9330				2			0
291.99	Acid Soluble Ni, Other (ppm)	0255	1.082	0.2800				1			0
291.99	Acid Soluble Ni, Other (ppm)	0405	< 1					1			5
301.30	Acid Soluble Se, ICP (ppm)	0524	0.1300	0.0200				2			0
301.30	Acid Soluble Se, ICP (ppm)	0523	0.2490	0.0000				2			0
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	0529	0.0700	0.0400				1			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0563	0.4044	0.0082				2			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0515	5.028	7.280				2			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0527	< 0.001					2			5
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0494	< 1					2			5
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0136	< 5					2			5
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0515	3.548	1.476				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				
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0368	< 1.2					1			5
301.99	Acid Soluble Se, Other (ppm)	0255	3.058	0.0940				1			0
301.99	Acid Soluble Se, Other (ppm)	0220	< 0.3					1			5
301.99	Acid Soluble Se, Other (ppm)	0405	< 1					1			5
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0035	0.2005	0.0190	0.2272	0.0349	0.0100	3	-0.76		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0527	0.2144	0.0035	0.2272	0.0349	0.0100	3	-0.37		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0563	0.2667	0.0074	0.2272	0.0349	0.0100	3	1.13		0
311.99	Sodium, Other (%)	0368	0.2155	0.0070	0.2252	0.0130	0.0157	3	-0.74		0
311.99	Sodium, Other (%)	0096	0.2200	0.0000	0.2252	0.0130	0.0157	3	-0.40		0
311.99	Sodium, Other (%)	0354	0.2400	0.0400	0.2252	0.0130	0.0157	3	1.14		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (0.05%)	0040	0.0500	0.0000	0.0509	0.0015	0.0025	3	-0.58		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (0.05%)	0538	0.0500	0.0020	0.0509	0.0015	0.0025	3	-0.58		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (0.05%)	0029	0.0527	0.0055	0.0509	0.0015	0.0025	3	1.15		0
321.01	Acid Soluble Zn, AA, organic 965.09 (0.05%)	0498	0.0460	0.0000				1			0
321.02	Acid Soluble Zn, AA, 965.09, test portion 2006.03A-C (0.05%)	0529	0.0500	0.0000				1			0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0354	0.0450	0.0100	0.0495	0.0018	0.0015	20	-2.54	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0377	0.0457	0.0012	0.0495	0.0018	0.0015	20	-2.14	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0255	0.0470	0.0020	0.0495	0.0018	0.0015	20	-1.40	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0035	0.0480	0.0020	0.0495	0.0018	0.0015	20	-0.84	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0390	0.0485	0.0026	0.0495	0.0018	0.0015	20	-0.55	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0095	0.0488	0.0024	0.0495	0.0018	0.0015	20	-0.38	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0157	0.0490	0.0040	0.0495	0.0018	0.0015	20	-0.27	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0324	0.0490	0.0020	0.0495	0.0018	0.0015	20	-0.27	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0444	0.0490	0.0000	0.0495	0.0018	0.0015	20	-0.27	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0023	0.0500	0.0000	0.0495	0.0018	0.0015	20	0.30	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0102	0.0500	0.0000	0.0495	0.0018	0.0015	20	0.30	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0169	0.0500	0.0000	0.0495	0.0018	0.0015	20	0.30	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0231	0.0500	0.0000	0.0495	0.0018	0.0015	20	0.30	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0234	0.0500	0.0000	0.0495	0.0018	0.0015	20	0.30	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0371	0.0500	0.0000	0.0495	0.0018	0.0015	20	0.30	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0472	0.0500	0.0000	0.0495	0.0018	0.0015	20	0.30	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0433	0.0509	0.0011	0.0495	0.0018	0.0015	20	0.78	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0360	0.0515	0.0010	0.0495	0.0018	0.0015	20	1.14	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0096	0.0531	0.0017	0.0495	0.0018	0.0015	20	2.02	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0402	0.0616	0.0007	0.0495	0.0018	0.0015	20	6.84	High	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (0.05%)	0552	0.3100	0.3400	0.0495	0.0018	0.0015	20	147.52	High	2
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (0.05%)	0394	0.0465	0.0005	0.0476	0.0019	0.0006	3	-0.59		0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (0.05%)	0300	0.0465	0.0010	0.0476	0.0019	0.0006	3	-0.56		0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (0.05%)	0220	0.0497	0.0004	0.0476	0.0019	0.0006	3	1.15		0
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0527	0.0488	0.0001	0.0503	0.0012	0.0017	11	-1.22	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0043	0.0490	0.0040	0.0503	0.0012	0.0017	11	-1.02	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0494	0.0498	0.0004	0.0503	0.0012	0.0017	11	-0.38	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0055	0.0500	0.0000	0.0503	0.0012	0.0017	11	-0.22	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0136	0.0500	0.0000	0.0503	0.0012	0.0017	11	-0.22	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0169	0.0500	0.0000	0.0503	0.0012	0.0017	11	-0.22	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0117	0.0504	0.0000	0.0503	0.0012	0.0017	11	0.10	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0486	0.0505	0.0010	0.0503	0.0012	0.0017	11	0.18	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0563	0.0505	0.0024	0.0503	0.0012	0.0017	11	0.18	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0037	0.0530	0.0040	0.0503	0.0012	0.0017	11	2.17	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (0.05%)	0515	0.0543	0.0072	0.0503	0.0012	0.0017	11	3.21	OK	0
321.99	Acid Soluble Zn, Other (0.05%)	0389	0.0200	0.0000	0.0496	0.0016	0.0008	10	-16.88	Low	0
321.99	Acid Soluble Zn, Other (0.05%)	0524	0.0483	0.0009	0.0496	0.0016	0.0008	10	-0.78	OK	0
321.99	Acid Soluble Zn, Other (0.05%)	0523	0.0485	0.0010	0.0496	0.0016	0.0008	10	-0.64	OK	0
321.99	Acid Soluble Zn, Other (0.05%)	0220	0.0487	0.0005	0.0496	0.0016	0.0008	10	-0.55	OK	0
321.99	Acid Soluble Zn, Other (0.05%)	0042	0.0500	0.0000	0.0496	0.0016	0.0008	10	0.22	OK	0
321.99	Acid Soluble Zn, Other (0.05%)	0405	0.0501	0.0005	0.0496	0.0016	0.0008	10	0.25	OK	0
321.99	Acid Soluble Zn, Other (0.05%)	0368	0.0505	0.0007	0.0496	0.0016	0.0008	10	0.47	OK	0
321.99	Acid Soluble Zn, Other (0.05%)	0027	0.0505	0.0010	0.0496	0.0016	0.0008	10	0.50	OK	0
321.99	Acid Soluble Zn, Other (0.05%)	0515	0.0506	0.0017	0.0496	0.0016	0.0008	10	0.53	OK	0
321.99	Acid Soluble Zn, Other (0.05%)	0516	0.1740	0.0020	0.0496	0.0016	0.0008	10	70.87	High	0
325.00	Water Soluble Zn, AA (%)	0356	0.1440	0.0100				1			0
325.30	Water Soluble Zn, ICP (%)	0546	0.0529	0.0008				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.