

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 210911

Grade 8-5-1

Statistical Summary

Methods: 129

Labs Reporting: 90

Issue Date : 10/31/2021

Method Code	Analyte & Method Sample # 210911	# 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 (%)	2	2	0.7425	0.7389								
001.99	Ammoniacal N, Other (%)	17	17	1.017	0.4936	1.021		0.5527	0.1676	54.16%		0.0354	3.99%
003.10	Water Insoluble N, Method 1 (%)	5	5	6.066	0.2522	6.066		0.2522	0.1410	4.16%		0.0855	3.05%
003.99	Water Insoluble N, Other (%)	5	5	6.637	0.0368	6.637		0.0368	0.0206	0.56%		0.0100	3.01%
005.99	Urea N, Other (%)	2	2	3.291	4.505								
009.10	Ammoniacal Plus Nitrate N, Devarda (%)	1		1.415									
010.11	Total N, Modified Comprehensive (8%)	6	6	7.212	1.874	7.921	0.5492	0.1838	0.0938	2.32%	0.78	0.0833	2.93%
010.12	Total N, Salicylic (8%)	2	2	7.923	0.0248								
010.16	Total N, Raney (8%)	1		7.580									
010.60	Total N, Combustion (8%)	54	53	8.121	0.1364	8.097	0.5519	0.0868	0.0149	1.07%	0.37	0.0783	2.92%
010.99	Total N, Other (8%)	19	19	7.918	0.4421	7.996	0.5500	0.2164	0.0621	2.71%	0.92	0.0658	2.93%
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	2	2	4.023	0.1096								
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	10	10	4.257	0.5152	4.178		0.3700	0.1463	8.86%		0.1144	3.23%
020.40	Total P2O5, Automated (%)	1		4.005									
020.50	Total P2O5, ICP (%)	23	22	4.173	0.4629	4.203		0.4447	0.1185	10.58%		0.0839	3.22%
020.99	Total P2O5, Other (%)	8	8	4.609	0.5498	4.609		0.6235	0.2756	13.53%		0.0743	3.18%
040.50	Indirect Available P2O5, ICP (5%)	1		4.479									
041.10	Direct Available P2O5, Gravimetric Quinolinium (5%)	4	4	3.502	0.4780	3.502	0.6700	0.4780	0.2987	13.65%	1.66	0.0753	3.31%
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (5%)	7	7	3.387	0.4448	3.427	0.6700	0.4081	0.1928	11.91%	1.42	0.0971	3.32%
041.20	Direct Available P2O5, Spectrophotometric (5%)	2	2	4.740	0.4243								
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (5%)	8	8	3.820	0.6022	3.733	0.6700	0.4595	0.2031	12.31%	1.60	0.1944	3.28%
041.50	Direct Available P2O5, ICP (5%)	5	5	3.730	0.5292	3.730	0.6700	0.5292	0.2959	14.19%	1.84	0.1760	3.28%
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (5%)	7	7	3.969	0.5223	3.868	0.6700	0.3300	0.1559	8.53%	1.15	0.1077	3.26%
041.99	Direct Available P2O5, Other (5%)	13	13	4.988	0.0792	5.008	0.6700	0.0390	0.0135	0.78%	0.14	0.0692	3.14%
048.20	Water Soluble P2O5, Spectrophotometric (%)	1		0.1000									
048.99	Water Soluble P2O5, Other (%)	1		0.6150									
050.00	Soluble K2O, STPB Oxalate (1%)	5	5	0.7040	0.5395	0.7040	0.4100	0.5395	0.3016	76.64%	3.07	0.0320	4.22%
050.30	Soluble K2O, AA (Oxalate) (1%)	5	5	1.289	0.1755	1.289	0.4100	0.1755	0.0981	13.62%	1.00	0.0566	3.85%
050.32	Soluble K2O, AA (Citrate-EDTA) (1%)	1		1.040									
050.50	Soluble K2O, ICP (Oxalate) (1%)	10	10	1.334	0.0883	1.338	0.4100	0.0923	0.0365	6.90%	0.52	0.0325	3.83%
050.51	Soluble K2O, ICP (Citrate) (1%)	5	5	1.334	0.1622	1.334	0.4100	0.1622	0.0907	12.16%	0.92	0.0520	3.83%
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	9	8	1.473	0.2140	1.467	0.4100	0.2585	0.1142	17.62%	1.47	0.0755	3.78%
050.60	Soluble K2O, Flame Photometric (Oxalate) (1%)	1		1.090									

Method Code	Analyte & Method Sample # 210911	# 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)	Howitz %RSD
050.61	Soluble K2O, Flame Photometric (Citrate) (1%)	1		2.190									
050.62	Soluble K2O, Flame Photometric (Citrate-EDTA) (1%)	2	2	1.398	0.0248								
050.99	Soluble K2O, Other (1%)	41	40	1.245	0.1729	1.227	0.4100	0.1503	0.0297	12.24%	0.85	0.0459	3.88%
060.10	Water (Free), Vacuum Desiccation (%)	1		7.040									
060.99	Water (Free), Other (%)	1		11.00									
101.00	Acid Soluble Ca, AA, inorganic 965.09 (%)	1		3.520									
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	4	4	3.424	0.0763	3.424	0.3712	0.0763	0.0477	2.23%	0.48	0.0925	3.32%
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	1		3.522									
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	6	6	3.336	0.1849	3.336	0.3668	0.2097	0.1070	6.29%	1.33	0.0582	3.34%
101.99	Acid Soluble Ca, Other (%)	3	3	3.542	0.0506	3.542	0.3771	0.0506	0.0365	1.43%	0.31	0.0300	3.31%
121.00	Acid Soluble Mg, AA, inorganic 965.09 (%)	1		0.2660									
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	4	4	0.2516	0.0300	0.2516	0.2126	0.0299	0.0187	11.90%	0.33	0.0053	4.92%
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (%)	1		0.2445									
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	7	7	0.2318	0.0248	0.2321	0.2116	0.0274	0.0129	11.78%	0.30	0.0057	4.98%
121.99	Acid Soluble Mg, Other (%)	5	5	0.2471	0.0466	0.2471	0.2124	0.0466	0.0260	18.85%	0.51	0.0238	4.94%
143.99	Elemental S, Other (%)	1		0.9300									
145.99	Sulfate S, HCl soluble, Other (%)	1		0.2210									
148.04	Total S, ICP, w/Br digestion (%)	1		0.7925									
148.07	Total S, ICP, test portion as in 2017.02 (%)	6	5	0.8221	0.0896	0.8523	0.2426	0.0565	0.0316	6.63%	0.54	0.0139	4.10%
148.99	Total S, Other (%)	1		0.7100									
149.04	S - HNO3 soluble, ICP (%)	3	3	0.8105	0.0423	0.8105		0.0422	0.0305	5.21%		0.0132	4.13%
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid (ppm)	1		0.2750									
151.30	Acid Soluble As, ICP (ppm)	6	4	0.4082	0.2109	0.4872		0.0863	0.0540	17.72%		0.0186	17.82%
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	1		0.6500									
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	7	4	1.725	1.799	1.519		1.294	0.8089	85.18%		0.7933	15.02%
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	2	0	1.241	1.331								
151.99	Acid Soluble As, Other (ppm)	6	5	1.000	1.015	1.132		1.076	0.6013	95.02%		0.2920	15.70%
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	1		0.0100									
165.99	Acid Soluble B, Other (%)	8	6	5.555	15.70	0.0043	0.0036	0.0010	0.0005	22.68%	0.62	0.0001	9.09%
171.99	Water Soluble B, Other (%)	1		0.0148									
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	1		0.5000									
181.30	Acid Soluble Cd, ICP (ppm)	7	6	0.5845	1.049	0.1946		0.0620	0.0317	31.89%		0.0129	20.47%
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	1		0.3000									
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	6	2	0.6393	0.7499	0.3327		0.1164	0.1028	34.97%		0.0168	18.88%
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	1		0.2500									
181.99	Acid Soluble Cd, Other (ppm)	5	5	0.2621	0.0854	0.2621		0.0854	0.0477	32.57%		0.0262	19.57%
190.00	Water Soluble Cl, Titrimetric (%)	1		0.7450									
191.30	Acid Soluble Cr, ICP (ppm)	8	8	59.53	26.75	59.53		30.34	13.41	50.97%		3.497	8.65%
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	1		49.00									
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	7	5	53.15	28.71	60.24		20.51	11.47	34.05%		1.750	8.63%
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	2	2	41.36	25.48								
191.99	Acid Soluble Cr, Other (ppm)	5	5	55.35	29.00	55.35		29.00	16.21	52.39%		2.274	8.74%
202.30	Acid Soluble Co, ICP (ppm)	6	6	32.01	16.23	32.01	10.6041	18.41	9.395	57.51%	4.05	1.256	9.49%
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	2	2	25.85	20.44								

Method Code	Analyte & Method Sample # 210911	# 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
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	7	7	36.20	14.97	37.22	12.1646	14.58	6.887	39.17%	2.79	4.387	9.28%
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	2	2	12.06	8.282								
202.99	Acid Soluble Co, Other (ppm)	5	5	35.74	16.78	35.74	11.7217	16.78	9.382	46.96%	3.34	2.158	9.34%
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	2	2	0.0155	0.0028								
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	10	9	0.0168	0.0039	0.0180	0.0068	0.0024	0.0010	13.13%	0.81	0.0005	7.32%
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	2	2	87.53	123.8								
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	12	11	0.0187	0.0069	0.0168	0.0067	0.0024	0.0009	14.21%	0.83	0.0010	7.40%
221.99	Acid Soluble Cu, Other (%)	11	10	3.108	10.25	0.0161	0.0066	0.0016	0.0006	10.00%	0.57	0.0002	7.45%
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	1		0.2060									
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	5	5	0.3810	0.2495	0.3810	0.0431	0.2495	0.1395	65.49%	13.49	0.0120	4.62%
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (%)	1		2.685									
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	7	6	0.2554	0.0274	0.2584	0.0308	0.0265	0.0135	10.25%	2.00	0.0014	4.90%
241.99	Acid Soluble Fe, Other (%)	4	4	0.2346	0.0152	0.2346	0.0285	0.0152	0.0095	6.47%	1.24	0.0033	4.97%
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	1		2.000									
251.30	Acid Soluble Pb, ICP (ppm)	9	7	2.146	0.9911	2.285		0.6126	0.2894	26.81%		0.1124	14.13%
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	1		1.700									
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	7	4	11.51	22.48	17.66		29.81	18.63	168.81%		20.88	10.38%
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	2	1	3.492	4.090								
251.99	Acid Soluble Pb, Other (ppm)	5	4	1.991	0.7140	2.239		0.5201	0.3251	23.23%		0.0375	14.17%
261.00	Acid Soluble Mn, AA, Mn2+ only (%)	1		0.0210									
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	2	1	0.0146	0.0064								
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (%)	1		0.0350									
261.34	Acid Soluble Mn, ICP, test portion 2006.03A-C (%)	1		210.1									
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	6	5	0.0199	0.0007	0.0198	0.0070	0.0008	0.0004	3.79%	0.25	0.0002	7.22%
261.99	Acid Soluble Mn, Other (%)	4	4	0.0169	0.0028	0.0169	0.0067	0.0028	0.0018	16.77%	0.99	0.0011	7.39%
281.00	Acid Soluble Hg, AA (ppm)	1		0.0500									
281.30	Acid Soluble Hg, ICP (ppm)	4	1	0.1528	0.2373	0.0169		0.0028	0.0035	16.77%		0.0380	22.00%
281.99	Acid Soluble Hg, Other (ppm)	8	4	0.0134	0.0127	0.0088		0.0044	0.0028	49.93%		0.0032	22.00%
289.30	Acid Soluble Mo, ICP (ppm)	8	8	4.531	2.162	4.790	2.4370	1.805	0.7975	37.68%	1.73	0.2882	12.64%
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	1		4.650									
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	9	7	5.341	1.603	6.049	2.8147	0.8158	0.3854	13.49%	0.68	0.2045	12.20%
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	2	2	5.443	1.475								
289.99	Acid Soluble Mo, Other (ppm)	3	3	6.347	0.3287	6.347	2.9040	0.3287	0.2372	5.18%	0.26	0.3133	12.11%
291.30	Acid Soluble Ni, ICP (ppm)	7	7	29.04	8.184	30.21		6.343	2.997	21.00%		1.862	9.58%
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	1		30.00									
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	7	5	25.73	13.40	29.90		9.038	5.052	30.23%		0.8762	9.59%
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	2	2	23.89	12.85								
291.99	Acid Soluble Ni, Other (ppm)	6	6	33.66	15.00	35.29		10.17	5.189	28.82%		1.557	9.36%
301.30	Acid Soluble Se, ICP (ppm)	4	4	1.176	0.6430	1.176		0.6430	0.4019	54.68%		0.0467	15.61%
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	1		0.3000									
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	6	3	4.468	8.638	1.283		1.234	0.8903	96.18%		1.541	15.41%
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	2	1	3.779	3.789								
301.99	Acid Soluble Se, Other (ppm)	6	4	0.9993	1.054	1.424		1.057	0.6603	74.20%		0.0253	15.17%
311.00	Sodium, AA (%)	1		0.5525									

Method Code	Analyte & Method Sample # 210911	# 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
311.33	Sodium, ICP, test portion as in 2017.02 (%)	6	6	0.7778	0.0408	0.7778	0.0828	0.0462	0.0236	5.94%	1.30	0.0064	4.15%
311.99	Sodium, Other (%)	2	2	0.5705	0.2539								
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	2	2	0.0195	0.0057								
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	11	9	0.0732	0.1444	0.0209	0.0071	0.0016	0.0007	7.73%	0.53	0.0010	7.16%
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	2	2	121.9	172.4								
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	12	11	0.0205	0.0021	0.0200	0.0070	0.0019	0.0007	9.24%	0.62	0.0007	7.20%
321.99	Acid Soluble Zn, Other (%)	10	9	0.0256	0.0157	0.0205	0.0070	0.0021	0.0009	10.05%	0.68	0.0007	7.18%
325.00	Water Soluble Zn, AA (%)	1		0.0070									

The Method IA Ratio = 2.33 * Robust SD / IA at the Method Assigned Value. IA ratios of 1 and less indicate participant data dispersion is as good or less than the IA. Red indicates the IA ratio is significantly greater than 1, Orange indicates marginally greater than 1, Green indicates IA ratio is not significantly greater than 1 and Grey indicates < 6 labs reporting. The Horwitz %RSD is calculated using the Thompson Modification, Analyst,2000,125,385-386.

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 210911

Method Precision Report

Grade 8-5-1

Issue Date : 10/31/2021

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility sR	Between Labs %RSD	Within Labs %rds	Reproducibility %RSD	sR/sr
001.99	Ammoniacal N, Other (%)	17	16	1.000	0.5048	0.5044	0.0272	0.5052	50.42%	2.72%	50.50%	18.59
003.10	Water Insoluble N, Method I (%)	5	5	6.066	0.2522	0.2458	0.0800	0.2585	4.05%	1.32%	4.26%	3.232
003.99	Water Insoluble N, Other (%)	5	5	6.637	0.0368	0.0364	0.0084	0.0373	0.55%	0.13%	0.56%	4.460
010.11	Total N, Modified Comprehensive (8%)	6	5	7.976	0.1001	0.0919	0.0562	0.1077	1.15%	0.70%	1.35%	1.917
010.60	Total N, Combustion (8%)	54	50	8.096	0.0960	0.0837	0.0667	0.1070	1.03%	0.82%	1.32%	1.605
010.99	Total N, Other (8%)	19	18	8.010	0.1982	0.1925	0.0667	0.2037	2.40%	0.83%	2.54%	3.055
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	10	9	4.117	0.2775	0.2651	0.1160	0.2893	6.44%	2.82%	7.03%	2.495
020.50	Total P2O5, ICP (%)	23	22	4.180	0.4722	0.4686	0.0822	0.4758	11.21%	1.97%	11.38%	5.784
020.99	Total P2O5, Other (%)	8	7	4.700	0.5247	0.5239	0.0421	0.5256	11.15%	0.90%	11.18%	12.49
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (5%)	7	7	3.387	0.4448	0.4414	0.0781	0.4482	13.03%	2.31%	13.23%	5.739
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (5%)	8	7	3.634	0.3179	0.3040	0.1313	0.3312	8.37%	3.61%	9.11%	2.522
041.50	Direct Available P2O5, ICP (5%)	5	5	3.730	0.5292	0.5146	0.1750	0.5435	13.80%	4.69%	14.57%	3.105
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (5%)	7	6	3.786	0.2108	0.1981	0.1021	0.2229	5.23%	2.70%	5.89%	2.182
041.99	Direct Available P2O5, Other (5%)	13	12	5.007	0.0463	0.0148	0.0621	0.0638	0.29%	1.24%	1.28%	1.028
050.00	Soluble K2O, STPB Oxalate (1%)	5	5	0.7040	0.5395	0.5391	0.0290	0.5399	76.58%	4.12%	76.69%	18.63
050.30	Soluble K2O, AA (Oxalate) (1%)	5	5	1.289	0.1755	0.1725	0.0463	0.1786	13.38%	3.59%	13.86%	3.859
050.50	Soluble K2O, ICP (Oxalate) (1%)	10	10	1.334	0.0883	0.0859	0.0292	0.0907	6.43%	2.19%	6.80%	3.108
050.51	Soluble K2O, ICP (Citrate) (1%)	5	5	1.334	0.1622	0.1580	0.0520	0.1663	11.84%	3.90%	12.47%	3.201
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	9	8	1.467	0.2279	0.2226	0.0691	0.2331	15.18%	4.71%	15.89%	3.375
050.99	Soluble K2O, Other (1%)	41	36	1.216	0.1384	0.1363	0.0341	0.1405	11.21%	2.81%	11.55%	4.118
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	6	6	3.336	0.1849	0.1811	0.0529	0.1887	5.43%	1.58%	5.66%	3.569
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	7	7	0.2318	0.0248	0.0245	0.0049	0.0250	10.59%	2.10%	10.79%	5.134
148.07	Total S, ICP, test portion as in 2017.02 (%)	6	5	0.8523	0.0565	0.0558	0.0122	0.0571	6.55%	1.44%	6.70%	4.666
165.99	Acid Soluble B, Other (%)	8	6	0.0050	0.0025	0.0025	0.0001	0.0025	50.03%	2.65%	50.10%	18.90
181.30	Acid Soluble Cd, ICP (ppm)	7	5	0.1893	0.0773	0.0772	0.0065	0.0775	40.79%	3.43%	40.93%	11.92
191.30	Acid Soluble Cr, ICP (ppm)	8	8	59.53	26.75	26.65	3.290	26.85	44.77%	5.53%	45.11%	8.162
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	7	5	60.24	20.51	20.49	1.471	20.54	34.01%	2.44%	34.10%	13.96
191.99	Acid Soluble Cr, Other (ppm)	5	5	55.35	29.00	28.96	2.090	29.04	52.32%	3.78%	52.46%	13.90
202.30	Acid Soluble Co, ICP (ppm)	6	6	32.01	16.23	16.21	1.131	16.25	50.65%	3.53%	50.77%	14.37

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
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	7	7	36.20	14.97	14.60	4.682	15.34	40.34%	12.93%	42.36%	3.276
202.99	Acid Soluble Co, Other (ppm)	5	5	35.74	16.78	16.73	1.929	16.84	46.81%	5.40%	47.12%	8.729
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	10	9	0.0176	0.0032	0.0032	0.0005	0.0032	18.27%	2.91%	18.50%	6.363
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	12	10	0.0172	0.0018	0.0018	0.0007	0.0019	10.25%	4.23%	11.09%	2.622
221.99	Acid Soluble Cu, Other (%)	11	9	0.0162	0.0019	0.0019	0.0002	0.0019	11.44%	0.96%	11.48%	12.02
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	7	5	0.2664	0.0144	0.0144	0.0015	0.0145	5.41%	0.55%	5.43%	9.956
251.30	Acid Soluble Pb, ICP (ppm)	9	7	2.285	0.5402	0.5358	0.0969	0.5445	23.45%	4.24%	23.83%	5.619
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	6	5	0.0198	0.0008	0.0007	0.0002	0.0008	3.72%	0.98%	3.85%	3.914
289.30	Acid Soluble Mo, ICP (ppm)	8	7	5.177	1.249	1.224	0.3451	1.272	23.65%	6.67%	24.58%	3.687
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	9	7	5.854	1.157	1.150	0.1760	1.164	19.65%	3.01%	19.88%	6.612
291.30	Acid Soluble Ni, ICP (ppm)	7	6	31.80	4.053	3.944	1.317	4.158	12.40%	4.14%	13.08%	3.157
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	7	5	29.90	9.038	9.016	0.8999	9.060	30.15%	3.01%	30.30%	10.07
291.99	Acid Soluble Ni, Other (ppm)	6	6	33.66	15.00	14.96	1.419	15.03	44.45%	4.22%	44.65%	10.59
311.33	Sodium, ICP, test portion as in 2017.02 (%)	6	6	0.7778	0.0407	0.0405	0.0059	0.0410	5.21%	0.76%	5.27%	6.897
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	11	9	0.0211	0.0025	0.0024	0.0010	0.0026	11.18%	4.64%	12.11%	2.607
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	12	10	0.0201	0.0017	0.0017	0.0005	0.0017	8.25%	2.56%	8.64%	3.372
321.99	Acid Soluble Zn, Other (%)	10	8	0.0201	0.0015	0.0014	0.0006	0.0016	7.12%	3.02%	7.73%	2.564

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

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 210911

Grade 8-5-1

Lab Values

Methods: 129

Labs Reporting: 90

Issue Date : 10/31/2021

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0451	0.2200	0.0000				2			0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0309	1.265	0.0300				2			0
001.99	Ammoniacal N, Other (%)	0231	0.1600	0.0400	1.021	0.5527	0.0354	17	-1.56	NA	0
001.99	Ammoniacal N, Other (%)	0423	0.1650	0.0100	1.021	0.5527	0.0354	17	-1.55	NA	0
001.99	Ammoniacal N, Other (%)	0524	0.2420	0.0160	1.021	0.5527	0.0354	17	-1.41	NA	0
001.99	Ammoniacal N, Other (%)	0546	0.3800	0.0000	1.021	0.5527	0.0354	17	-1.16	NA	0
001.99	Ammoniacal N, Other (%)	0255	0.7340	0.0160	1.021	0.5527	0.0354	17	-0.52	NA	0
001.99	Ammoniacal N, Other (%)	0532	0.9200	0.0400	1.021	0.5527	0.0354	17	-0.18	NA	0
001.99	Ammoniacal N, Other (%)	0220	1.000	0.0600	1.021	0.5527	0.0354	17	-0.04	NA	0
001.99	Ammoniacal N, Other (%)	0027	1.220	0.1000	1.021	0.5527	0.0354	17	0.36	NA	0
001.99	Ammoniacal N, Other (%)	0549	1.285	0.1300	1.021	0.5527	0.0354	17	0.48	NA	0
001.99	Ammoniacal N, Other (%)	0577	1.310	0.0400	1.021	0.5527	0.0354	17	0.52	NA	0
001.99	Ammoniacal N, Other (%)	0548	1.330	0.0200	1.021	0.5527	0.0354	17	0.56	NA	0
001.99	Ammoniacal N, Other (%)	0368	1.336	0.0240	1.021	0.5527	0.0354	17	0.57	NA	0
001.99	Ammoniacal N, Other (%)	0559	1.365	0.0100	1.021	0.5527	0.0354	17	0.62	NA	0
001.99	Ammoniacal N, Other (%)	0551	1.395	0.0500	1.021	0.5527	0.0354	17	0.68	NA	0
001.99	Ammoniacal N, Other (%)	0565	1.405	0.0300	1.021	0.5527	0.0354	17	0.70	NA	0
001.99	Ammoniacal N, Other (%)	0564	1.425	0.0100	1.021	0.5527	0.0354	17	0.73	NA	0
001.99	Ammoniacal N, Other (%)	0538	1.619	0.0060	1.021	0.5527	0.0354	17	1.08	NA	0
003.10	Water Insoluble N, Method I (%)	0029	5.710	0.2200	6.066	0.2522	0.0855	5	-1.41		0
003.10	Water Insoluble N, Method I (%)	0117	5.891	0.0676	6.066	0.2522	0.0855	5	-0.69		0
003.10	Water Insoluble N, Method I (%)	0220	6.205	0.0300	6.066	0.2522	0.0855	5	0.55		0
003.10	Water Insoluble N, Method I (%)	0451	6.245	0.0100	6.066	0.2522	0.0855	5	0.71		0
003.10	Water Insoluble N, Method I (%)	0027	6.280	0.1000	6.066	0.2522	0.0855	5	0.85		0
003.99	Water Insoluble N, Other (%)	0574	6.605	0.0100	6.637	0.0368	0.0100	5	-0.87		0
003.99	Water Insoluble N, Other (%)	0564	6.620	0.0000	6.637	0.0368	0.0100	5	-0.46		0
003.99	Water Insoluble N, Other (%)	0559	6.625	0.0100	6.637	0.0368	0.0100	5	-0.33		0
003.99	Water Insoluble N, Other (%)	0565	6.635	0.0100	6.637	0.0368	0.0100	5	-0.05		0
003.99	Water Insoluble N, Other (%)	0577	6.700	0.0200	6.637	0.0368	0.0100	5	1.71		0
005.99	Urea N, Other (%)	0524	0.1060	0.0320				2			0
005.99	Urea N, Other (%)	0538	6.477	0.0270				2			0
009.10	Ammoniacal Plus Nitrate N, Devarda (%)	0574	1.415	0.0100				1			0
010.11	Total N, Modified Comprehensive (8%)	0546	3.390	0.1600	7.921	0.1838	0.0833	6	-21.96	Low	0
010.11	Total N, Modified Comprehensive (8%)	0548	7.800	0.0800	7.921	0.1838	0.0833	6	-0.59	OK	0
010.11	Total N, Modified Comprehensive (8%)	0540	7.990	0.0400	7.921	0.1838	0.0833	6	0.34	OK	0
010.11	Total N, Modified Comprehensive (8%)	0539	8.020	0.0600	7.921	0.1838	0.0833	6	0.48	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				
010.11	Total N, Modified Comprehensive (8%)	0309	8.030	0.1400	7.921	0.1838	0.0833	6	0.53	OK	0
010.11	Total N, Modified Comprehensive (8%)	0531	8.040	0.0200	7.921	0.1838	0.0833	6	0.58	OK	0
010.12	Total N, Salicylic (8%)	0572	7.905	0.3900				2			0
010.12	Total N, Salicylic (8%)	0568	7.940	0.1000				2			0
010.16	Total N, Raney (8%)	0419	7.580	0.1200				1			0
010.60	Total N, Combustion (8%)	0177	7.901	0.0250	8.097	0.0868	0.0783	53	-2.26	OK	0
010.60	Total N, Combustion (8%)	0234	7.935	0.0700	8.097	0.0868	0.0783	53	-1.86	OK	0
010.60	Total N, Combustion (8%)	0055	7.960	0.0200	8.097	0.0868	0.0783	53	-1.58	OK	0
010.60	Total N, Combustion (8%)	0494	7.965	0.0900	8.097	0.0868	0.0783	53	-1.52	OK	0
010.60	Total N, Combustion (8%)	0354	7.975	0.0300	8.097	0.0868	0.0783	53	-1.40	OK	0
010.60	Total N, Combustion (8%)	0231	7.990	0.0200	8.097	0.0868	0.0783	53	-1.23	OK	0
010.60	Total N, Combustion (8%)	0389	8.010	0.0800	8.097	0.0868	0.0783	53	-1.00	OK	0
010.60	Total N, Combustion (8%)	0561	8.015	0.1100	8.097	0.0868	0.0783	53	-0.94	OK	0
010.60	Total N, Combustion (8%)	0102	8.030	0.1600	8.097	0.0868	0.0783	53	-0.77	OK	0
010.60	Total N, Combustion (8%)	0422	8.030	0.0600	8.097	0.0868	0.0783	53	-0.77	OK	0
010.60	Total N, Combustion (8%)	0043	8.035	0.0300	8.097	0.0868	0.0783	53	-0.71	OK	0
010.60	Total N, Combustion (8%)	0292	8.035	0.0100	8.097	0.0868	0.0783	53	-0.71	OK	0
010.60	Total N, Combustion (8%)	0547	8.035	0.1100	8.097	0.0868	0.0783	53	-0.71	OK	0
010.60	Total N, Combustion (8%)	0131	8.037	0.2108	8.097	0.0868	0.0783	53	-0.69	OK	0
010.60	Total N, Combustion (8%)	0230	8.050	0.0600	8.097	0.0868	0.0783	53	-0.54	OK	0
010.60	Total N, Combustion (8%)	0486	8.050	0.0800	8.097	0.0868	0.0783	53	-0.54	OK	0
010.60	Total N, Combustion (8%)	0423	8.060	0.0600	8.097	0.0868	0.0783	53	-0.42	OK	0
010.60	Total N, Combustion (8%)	0073	8.065	0.0900	8.097	0.0868	0.0783	53	-0.37	OK	0
010.60	Total N, Combustion (8%)	0501	8.070	0.0600	8.097	0.0868	0.0783	53	-0.31	OK	0
010.60	Total N, Combustion (8%)	0095	8.075	0.1500	8.097	0.0868	0.0783	53	-0.25	OK	0
010.60	Total N, Combustion (8%)	0260	8.075	0.0300	8.097	0.0868	0.0783	53	-0.25	OK	0
010.60	Total N, Combustion (8%)	0523	8.075	0.0300	8.097	0.0868	0.0783	53	-0.25	OK	0
010.60	Total N, Combustion (8%)	0086	8.080	0.0682	8.097	0.0868	0.0783	53	-0.19	OK	0
010.60	Total N, Combustion (8%)	0472	8.085	0.0100	8.097	0.0868	0.0783	53	-0.14	OK	0
010.60	Total N, Combustion (8%)	0114	8.090	0.1400	8.097	0.0868	0.0783	53	-0.08	OK	0
010.60	Total N, Combustion (8%)	0324	8.090	0.0400	8.097	0.0868	0.0783	53	-0.08	OK	0
010.60	Total N, Combustion (8%)	0405	8.090	0.0800	8.097	0.0868	0.0783	53	-0.08	OK	0
010.60	Total N, Combustion (8%)	0007	8.100	0.2000	8.097	0.0868	0.0783	53	0.04	OK	0
010.60	Total N, Combustion (8%)	0027	8.100	0.0200	8.097	0.0868	0.0783	53	0.04	OK	0
010.60	Total N, Combustion (8%)	0040	8.100	0.0000	8.097	0.0868	0.0783	53	0.04	OK	0
010.60	Total N, Combustion (8%)	0042	8.100	0.0000	8.097	0.0868	0.0783	53	0.04	OK	0
010.60	Total N, Combustion (8%)	0534	8.100	0.0000	8.097	0.0868	0.0783	53	0.04	OK	0
010.60	Total N, Combustion (8%)	0390	8.102	0.0440	8.097	0.0868	0.0783	53	0.06	OK	0
010.60	Total N, Combustion (8%)	0356	8.104	0.1670	8.097	0.0868	0.0783	53	0.08	OK	0
010.60	Total N, Combustion (8%)	0325	8.110	0.0200	8.097	0.0868	0.0783	53	0.15	OK	0
010.60	Total N, Combustion (8%)	0233	8.113	0.1900	8.097	0.0868	0.0783	53	0.19	OK	0
010.60	Total N, Combustion (8%)	0255	8.122	0.1380	8.097	0.0868	0.0783	53	0.29	OK	0
010.60	Total N, Combustion (8%)	0035	8.135	0.1100	8.097	0.0868	0.0783	53	0.44	OK	0
010.60	Total N, Combustion (8%)	0136	8.150	0.1000	8.097	0.0868	0.0783	53	0.61	OK	0
010.60	Total N, Combustion (8%)	0377	8.150	0.0200	8.097	0.0868	0.0783	53	0.61	OK	0
010.60	Total N, Combustion (8%)	0452	8.155	0.0300	8.097	0.0868	0.0783	53	0.67	OK	0
010.60	Total N, Combustion (8%)	0049	8.165	0.0100	8.097	0.0868	0.0783	53	0.79	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 (8%)	0106	8.165	0.1300	8.097	0.0868	0.0783	53	0.79	OK	0
010.60	Total N, Combustion (8%)	0444	8.185	0.1300	8.097	0.0868	0.0783	53	1.02	OK	0
010.60	Total N, Combustion (8%)	0451	8.186	0.3070	8.097	0.0868	0.0783	53	1.02	OK	0
010.60	Total N, Combustion (8%)	0450	8.200	0.0000	8.097	0.0868	0.0783	53	1.19	OK	0
010.60	Total N, Combustion (8%)	0291	8.215	0.0100	8.097	0.0868	0.0783	53	1.36	OK	0
010.60	Total N, Combustion (8%)	0220	8.250	0.1400	8.097	0.0868	0.0783	53	1.76	OK	0
010.60	Total N, Combustion (8%)	0527	8.317	0.0550	8.097	0.0868	0.0783	53	2.53	OK	0
010.60	Total N, Combustion (8%)	0521	8.322	0.0000	8.097	0.0868	0.0783	53	2.60	OK	0
010.60	Total N, Combustion (8%)	0421	8.415	0.1900	8.097	0.0868	0.0783	53	3.67	OK	0
010.60	Total N, Combustion (8%)	0402	8.517	0.0250	8.097	0.0868	0.0783	53	4.83	OK	0
010.60	Total N, Combustion (8%)	0025	8.595	0.1900	8.097	0.0868	0.0783	53	5.74	OK	0
010.60	Total N, Combustion (8%)	0368	8.462	0.6520	8.097	0.0868	0.0783	53	4.21	OK	1
010.99	Total N, Other (8%)	0394	6.275	0.0020	7.996	0.2164	0.0658	19	-7.95	Low	0
010.99	Total N, Other (8%)	0576	7.550	0.1000	7.996	0.2164	0.0658	19	-2.06	OK	0
010.99	Total N, Other (8%)	0519	7.730	0.0600	7.996	0.2164	0.0658	19	-1.23	OK	0
010.99	Total N, Other (8%)	0553	7.745	0.0300	7.996	0.2164	0.0658	19	-1.16	OK	0
010.99	Total N, Other (8%)	0476	7.748	0.0452	7.996	0.2164	0.0658	19	-1.15	OK	0
010.99	Total N, Other (8%)	0493	8.000	0.1000	7.996	0.2164	0.0658	19	0.02	OK	0
010.99	Total N, Other (8%)	0577	8.005	0.0300	7.996	0.2164	0.0658	19	0.04	OK	0
010.99	Total N, Other (8%)	0574	8.020	0.0200	7.996	0.2164	0.0658	19	0.11	OK	0
010.99	Total N, Other (8%)	0564	8.035	0.0100	7.996	0.2164	0.0658	19	0.18	OK	0
010.99	Total N, Other (8%)	0565	8.050	0.0200	7.996	0.2164	0.0658	19	0.25	OK	0
010.99	Total N, Other (8%)	0533	8.055	0.1900	7.996	0.2164	0.0658	19	0.27	OK	0
010.99	Total N, Other (8%)	0551	8.075	0.0500	7.996	0.2164	0.0658	19	0.36	OK	0
010.99	Total N, Other (8%)	0563	8.090	0.2200	7.996	0.2164	0.0658	19	0.43	OK	0
010.99	Total N, Other (8%)	0513	8.095	0.0100	7.996	0.2164	0.0658	19	0.46	OK	0
010.99	Total N, Other (8%)	0538	8.096	0.0330	7.996	0.2164	0.0658	19	0.46	OK	0
010.99	Total N, Other (8%)	0532	8.115	0.0300	7.996	0.2164	0.0658	19	0.55	OK	0
010.99	Total N, Other (8%)	0524	8.174	0.0991	7.996	0.2164	0.0658	19	0.82	OK	0
010.99	Total N, Other (8%)	0506	8.230	0.1800	7.996	0.2164	0.0658	19	1.08	OK	0
010.99	Total N, Other (8%)	0559	8.360	0.0200	7.996	0.2164	0.0658	19	1.68	OK	0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0114	3.945	0.0100				2			0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0493	4.100	0.1000				2			0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0027	3.775	0.0500	4.178	0.3700	0.1144	10	-1.01	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0231	3.895	0.0100	4.178	0.3700	0.1144	10	-0.71	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0561	3.905	0.1500	4.178	0.3700	0.1144	10	-0.69	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0324	4.035	0.3100	4.178	0.3700	0.1144	10	-0.36	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0419	4.060	0.0000	4.178	0.3700	0.1144	10	-0.30	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0493	4.075	0.0500	4.178	0.3700	0.1144	10	-0.26	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0292	4.200	0.0200	4.178	0.3700	0.1144	10	0.05	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0548	4.490	0.0800	4.178	0.3700	0.1144	10	0.78	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0356	4.614	0.3340	4.178	0.3700	0.1144	10	1.10	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0309	5.520	0.1400	4.178	0.3700	0.1144	10	3.37	NA	0
020.40	Total P2O5, Automated (%)	0035	4.005	0.2900				1			0
020.50	Total P2O5, ICP (%)	0291	3.185	0.0100	4.203	0.4447	0.0839	22	-2.29	NA	0
020.50	Total P2O5, ICP (%)	0452	3.220	0.0800	4.203	0.4447	0.0839	22	-2.21	NA	0
020.50	Total P2O5, ICP (%)	0523	3.500	0.0000	4.203	0.4447	0.0839	22	-1.58	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 (%)	0390	3.915	0.0300	4.203	0.4447	0.0839	22	-0.65	NA	0
020.50	Total P2O5, ICP (%)	0552	3.945	0.1100	4.203	0.4447	0.0839	22	-0.58	NA	0
020.50	Total P2O5, ICP (%)	0524	3.958	0.1642	4.203	0.4447	0.0839	22	-0.55	NA	0
020.50	Total P2O5, ICP (%)	0472	4.060	0.0000	4.203	0.4447	0.0839	22	-0.32	NA	0
020.50	Total P2O5, ICP (%)	0547	4.090	0.0200	4.203	0.4447	0.0839	22	-0.26	NA	0
020.50	Total P2O5, ICP (%)	0450	4.100	0.0000	4.203	0.4447	0.0839	22	-0.23	NA	0
020.50	Total P2O5, ICP (%)	0444	4.120	0.0000	4.203	0.4447	0.0839	22	-0.19	NA	0
020.50	Total P2O5, ICP (%)	0231	4.145	0.0100	4.203	0.4447	0.0839	22	-0.13	NA	0
020.50	Total P2O5, ICP (%)	0402	4.174	0.0460	4.203	0.4447	0.0839	22	-0.07	NA	0
020.50	Total P2O5, ICP (%)	0260	4.225	0.2100	4.203	0.4447	0.0839	22	0.05	NA	0
020.50	Total P2O5, ICP (%)	0546	4.283	0.1658	4.203	0.4447	0.0839	22	0.18	NA	0
020.50	Total P2O5, ICP (%)	0422	4.295	0.0100	4.203	0.4447	0.0839	22	0.21	NA	0
020.50	Total P2O5, ICP (%)	0423	4.295	0.2100	4.203	0.4447	0.0839	22	0.21	NA	0
020.50	Total P2O5, ICP (%)	0255	4.536	0.1350	4.203	0.4447	0.0839	22	0.75	NA	0
020.50	Total P2O5, ICP (%)	0368	4.658	0.0709	4.203	0.4447	0.0839	22	1.02	NA	0
020.50	Total P2O5, ICP (%)	0389	4.705	0.0300	4.203	0.4447	0.0839	22	1.13	NA	0
020.50	Total P2O5, ICP (%)	0433	4.720	0.1000	4.203	0.4447	0.0839	22	1.16	NA	0
020.50	Total P2O5, ICP (%)	0527	4.774	0.2344	4.203	0.4447	0.0839	22	1.28	NA	0
020.50	Total P2O5, ICP (%)	0451	5.067	0.2090	4.203	0.4447	0.0839	22	1.94	NA	0
020.50	Total P2O5, ICP (%)	0042	4.000	0.6000	4.203	0.4447	0.0839	22	-0.46	NA	1
020.99	Total P2O5, Other (%)	0513	3.855	0.0300	4.609	0.6235	0.0743	8	-1.11	NA	0
020.99	Total P2O5, Other (%)	0476	3.972	0.2945	4.609	0.6235	0.0743	8	-0.94	NA	0
020.99	Total P2O5, Other (%)	0572	4.030	0.1200	4.609	0.6235	0.0743	8	-0.85	NA	0
020.99	Total P2O5, Other (%)	0577	4.925	0.0300	4.609	0.6235	0.0743	8	0.46	NA	0
020.99	Total P2O5, Other (%)	0565	4.950	0.0200	4.609	0.6235	0.0743	8	0.50	NA	0
020.99	Total P2O5, Other (%)	0564	4.965	0.0100	4.609	0.6235	0.0743	8	0.52	NA	0
020.99	Total P2O5, Other (%)	0539	5.045	0.0900	4.609	0.6235	0.0743	8	0.64	NA	0
020.99	Total P2O5, Other (%)	0515	5.132	0.0000	4.609	0.6235	0.0743	8	0.77	NA	0
040.50	Indirect Available P2O5, ICP (5%)	0521	4.479	0.0000				1			0
041.10	Direct Available P2O5, Gravimetric Quinolinium (5%)	0494	3.085	0.0100	3.502	0.4780	0.0753	4	-0.87		0
041.10	Direct Available P2O5, Gravimetric Quinolinium (5%)	0177	3.191	0.1032	3.502	0.4780	0.0753	4	-0.65		0
041.10	Direct Available P2O5, Gravimetric Quinolinium (5%)	0086	3.591	0.1679	3.502	0.4780	0.0753	4	0.19		0
041.10	Direct Available P2O5, Gravimetric Quinolinium (5%)	0102	4.140	0.0200	3.502	0.4780	0.0753	4	1.34		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (5%)	0095	2.535	0.1500	3.427	0.4081	0.0971	7	-1.98	Low	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (5%)	0220	3.055	0.1500	3.427	0.4081	0.0971	7	-0.82	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (5%)	0073	3.420	0.1000	3.427	0.4081	0.0971	7	-0.02	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (5%)	0055	3.580	0.1600	3.427	0.4081	0.0971	7	0.34	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (5%)	0136	3.650	0.0400	3.427	0.4081	0.0971	7	0.49	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (5%)	0049	3.710	0.0400	3.427	0.4081	0.0971	7	0.63	OK	0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (5%)	0513	3.760	0.0400	3.427	0.4081	0.0971	7	0.74	OK	0
041.20	Direct Available P2O5, Spectrophotometric (5%)	0576	4.440	0.0400				2			0
041.20	Direct Available P2O5, Spectrophotometric (5%)	0553	5.040	0.0800				2			0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (5%)	0568	3.175	0.1500	3.733	0.4595	0.1944	8	-1.11	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (5%)	0231	3.470	0.0400	3.733	0.4595	0.1944	8	-0.52	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (5%)	0472	3.490	0.0600	3.733	0.4595	0.1944	8	-0.48	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (5%)	0354	3.580	0.0800	3.733	0.4595	0.1944	8	-0.30	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (5%)	0230	3.640	0.1000	3.733	0.4595	0.1944	8	-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				
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (5%)	0177	3.964	0.1448	3.733	0.4595	0.1944	8	0.46	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (5%)	0055	4.120	0.4200	3.733	0.4595	0.1944	8	0.77	OK	0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (5%)	0563	5.120	0.5600	3.733	0.4595	0.1944	8	2.76	High	0
041.50	Direct Available P2O5, ICP (5%)	0325	3.050	0.5000	3.730	0.5292	0.1760	5	-1.28		0
041.50	Direct Available P2O5, ICP (5%)	0231	3.280	0.0000	3.730	0.5292	0.1760	5	-0.85		0
041.50	Direct Available P2O5, ICP (5%)	0007	4.000	0.2000	3.730	0.5292	0.1760	5	0.51		0
041.50	Direct Available P2O5, ICP (5%)	0131	4.080	0.0800	3.730	0.5292	0.1760	5	0.66		0
041.50	Direct Available P2O5, ICP (5%)	0421	4.240	0.1000	3.730	0.5292	0.1760	5	0.96		0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (5%)	0423	3.405	0.0900	3.868	0.3300	0.1077	7	-1.27	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (5%)	0040	3.750	0.1000	3.868	0.3300	0.1077	7	-0.32	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (5%)	0494	3.755	0.2300	3.868	0.3300	0.1077	7	-0.31	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (5%)	0233	3.873	0.0340	3.868	0.3300	0.1077	7	0.01	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (5%)	0377	3.925	0.2300	3.868	0.3300	0.1077	7	0.16	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (5%)	0486	4.005	0.0100	3.868	0.3300	0.1077	7	0.38	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (5%)	0043	5.070	0.0600	3.868	0.3300	0.1077	7	3.29	High	0
041.99	Direct Available P2O5, Other (5%)	0506	4.770	0.0600	5.008	0.0390	0.0692	13	-6.09	OK	0
041.99	Direct Available P2O5, Other (5%)	0574	4.880	0.1600	5.008	0.0390	0.0692	13	-3.27	OK	0
041.99	Direct Available P2O5, Other (5%)	0540	4.970	0.0400	5.008	0.0390	0.0692	13	-0.96	OK	0
041.99	Direct Available P2O5, Other (5%)	0538	5.000	0.0400	5.008	0.0390	0.0692	13	-0.19	OK	0
041.99	Direct Available P2O5, Other (5%)	0549	5.000	0.0600	5.008	0.0390	0.0692	13	-0.19	OK	0
041.99	Direct Available P2O5, Other (5%)	0533	5.005	0.1300	5.008	0.0390	0.0692	13	-0.07	OK	0
041.99	Direct Available P2O5, Other (5%)	0518	5.010	0.0400	5.008	0.0390	0.0692	13	0.06	OK	0
041.99	Direct Available P2O5, Other (5%)	0531	5.015	0.0100	5.008	0.0390	0.0692	13	0.19	OK	0
041.99	Direct Available P2O5, Other (5%)	0532	5.025	0.1700	5.008	0.0390	0.0692	13	0.45	OK	0
041.99	Direct Available P2O5, Other (5%)	0551	5.035	0.0300	5.008	0.0390	0.0692	13	0.70	OK	0
041.99	Direct Available P2O5, Other (5%)	0519	5.040	0.0600	5.008	0.0390	0.0692	13	0.83	OK	0
041.99	Direct Available P2O5, Other (5%)	0539	5.045	0.0900	5.008	0.0390	0.0692	13	0.96	OK	0
041.99	Direct Available P2O5, Other (5%)	0559	5.055	0.0100	5.008	0.0390	0.0692	13	1.22	OK	0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0472	0.1000	0.0200				1			0
048.99	Water Soluble P2O5, Other (%)	0572	0.6150	0.0300				1			0
050.00	Soluble K2O, STPB Oxalate (1%)	0494	0.1650	0.0500	0.7040	0.5395	0.0320	5	-1.00		0
050.00	Soluble K2O, STPB Oxalate (1%)	0055	0.2850	0.0700	0.7040	0.5395	0.0320	5	-0.78		0
050.00	Soluble K2O, STPB Oxalate (1%)	0561	0.5700	0.0000	0.7040	0.5395	0.0320	5	-0.25		0
050.00	Soluble K2O, STPB Oxalate (1%)	0405	1.045	0.0300	0.7040	0.5395	0.0320	5	0.63		0
050.00	Soluble K2O, STPB Oxalate (1%)	0102	1.455	0.0100	0.7040	0.5395	0.0320	5	1.39		0
050.30	Soluble K2O, AA (Oxalate) (1%)	0548	1.005	0.0700	1.289	0.1755	0.0566	5	-1.62		0
050.30	Soluble K2O, AA (Oxalate) (1%)	0040	1.250	0.1000	1.289	0.1755	0.0566	5	-0.22		0
050.30	Soluble K2O, AA (Oxalate) (1%)	0073	1.330	0.0400	1.289	0.1755	0.0566	5	0.24		0
050.30	Soluble K2O, AA (Oxalate) (1%)	0356	1.424	0.0030	1.289	0.1755	0.0566	5	0.77		0
050.30	Soluble K2O, AA (Oxalate) (1%)	0309	1.435	0.0700	1.289	0.1755	0.0566	5	0.83		0
050.32	Soluble K2O, AA (Citrate-EDTA) (1%)	0472	1.040	0.0200				1			0
050.50	Soluble K2O, ICP (Oxalate) (1%)	0422	1.165	0.0500	1.338	0.0923	0.0325	10	-1.74	OK	0
050.50	Soluble K2O, ICP (Oxalate) (1%)	0292	1.265	0.0100	1.338	0.0923	0.0325	10	-0.73	OK	0
050.50	Soluble K2O, ICP (Oxalate) (1%)	0419	1.290	0.0000	1.338	0.0923	0.0325	10	-0.48	OK	0
050.50	Soluble K2O, ICP (Oxalate) (1%)	0231	1.300	0.0400	1.338	0.0923	0.0325	10	-0.38	OK	0
050.50	Soluble K2O, ICP (Oxalate) (1%)	0055	1.315	0.0450	1.338	0.0923	0.0325	10	-0.24	OK	0
050.50	Soluble K2O, ICP (Oxalate) (1%)	0324	1.340	0.0800	1.338	0.0923	0.0325	10	0.02	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				
050.50	Soluble K2O, ICP (Oxalate) (1%)	0230	1.360	0.0600	1.338	0.0923	0.0325	10	0.22	OK	0
050.50	Soluble K2O, ICP (Oxalate) (1%)	0390	1.410	0.0200	1.338	0.0923	0.0325	10	0.73	OK	0
050.50	Soluble K2O, ICP (Oxalate) (1%)	0106	1.450	0.0000	1.338	0.0923	0.0325	10	1.13	OK	0
050.50	Soluble K2O, ICP (Oxalate) (1%)	0444	1.450	0.0200	1.338	0.0923	0.0325	10	1.13	OK	0
050.51	Soluble K2O, ICP (Citrate) (1%)	0131	1.135	0.0700	1.334	0.1622	0.0520	5	-1.23		0
050.51	Soluble K2O, ICP (Citrate) (1%)	0291	1.270	0.0000	1.334	0.1622	0.0520	5	-0.39		0
050.51	Soluble K2O, ICP (Citrate) (1%)	0452	1.295	0.0500	1.334	0.1622	0.0520	5	-0.24		0
050.51	Soluble K2O, ICP (Citrate) (1%)	0007	1.400	0.0000	1.334	0.1622	0.0520	5	0.41		0
050.51	Soluble K2O, ICP (Citrate) (1%)	0568	1.570	0.1400	1.334	0.1622	0.0520	5	1.45		0
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	0547	1.095	0.0100	1.467	0.2585	0.0755	8	-1.32	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	0233	1.233	0.1440	1.467	0.2585	0.0755	8	-0.83	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	0377	1.390	0.0200	1.467	0.2585	0.0755	8	-0.27	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	0423	1.415	0.0500	1.467	0.2585	0.0755	8	-0.18	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	0136	1.530	0.1000	1.467	0.2585	0.0755	8	0.22	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	0486	1.615	0.0100	1.467	0.2585	0.0755	8	0.53	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	0354	1.715	0.1900	1.467	0.2585	0.0755	8	0.88	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	0043	1.740	0.0800	1.467	0.2585	0.0755	8	0.97	OK	0
050.52	Soluble K2O, ICP (Citrate-EDTA) (1%)	0494	1.520	0.5400	1.467	0.2585	0.0755	8	0.19	OK	1
050.60	Soluble K2O, Flame Photometric (Oxalate) (1%)	0574	1.090	0.0200				1			0
050.61	Soluble K2O, Flame Photometric (Citrate) (1%)	0035	2.190	1.140				1			0
050.62	Soluble K2O, Flame Photometric (Citrate-EDTA) (1%)	0095	1.380	0.0400				2			0
050.62	Soluble K2O, Flame Photometric (Citrate-EDTA) (1%)	0513	1.415	0.0100				2			0
050.99	Soluble K2O, Other (1%)	0540	0.9888	0.0100	1.227	0.1503	0.0459	40	-1.59	OK	0
050.99	Soluble K2O, Other (1%)	0519	1.005	0.0100	1.227	0.1503	0.0459	40	-1.48	OK	0
050.99	Soluble K2O, Other (1%)	0451	1.016	0.0345	1.227	0.1503	0.0459	40	-1.41	OK	0
050.99	Soluble K2O, Other (1%)	0531	1.025	0.0100	1.227	0.1503	0.0459	40	-1.35	OK	0
050.99	Soluble K2O, Other (1%)	0551	1.050	0.0600	1.227	0.1503	0.0459	40	-1.18	OK	0
050.99	Soluble K2O, Other (1%)	0577	1.070	0.0400	1.227	0.1503	0.0459	40	-1.05	OK	0
050.99	Soluble K2O, Other (1%)	0564	1.075	0.0100	1.227	0.1503	0.0459	40	-1.01	OK	0
050.99	Soluble K2O, Other (1%)	0565	1.085	0.0100	1.227	0.1503	0.0459	40	-0.95	OK	0
050.99	Soluble K2O, Other (1%)	0476	1.089	0.1109	1.227	0.1503	0.0459	40	-0.92	OK	0
050.99	Soluble K2O, Other (1%)	0493	1.100	0.1000	1.227	0.1503	0.0459	40	-0.85	OK	0
050.99	Soluble K2O, Other (1%)	0533	1.120	0.0000	1.227	0.1503	0.0459	40	-0.71	OK	0
050.99	Soluble K2O, Other (1%)	0402	1.134	0.0215	1.227	0.1503	0.0459	40	-0.62	OK	0
050.99	Soluble K2O, Other (1%)	0506	1.175	0.0100	1.227	0.1503	0.0459	40	-0.35	OK	0
050.99	Soluble K2O, Other (1%)	0539	1.180	0.0400	1.227	0.1503	0.0459	40	-0.31	OK	0
050.99	Soluble K2O, Other (1%)	0546	1.183	0.0155	1.227	0.1503	0.0459	40	-0.30	OK	0
050.99	Soluble K2O, Other (1%)	0523	1.200	0.0000	1.227	0.1503	0.0459	40	-0.18	OK	0
050.99	Soluble K2O, Other (1%)	0538	1.210	0.0000	1.227	0.1503	0.0459	40	-0.11	OK	0
050.99	Soluble K2O, Other (1%)	0368	1.220	0.0067	1.227	0.1503	0.0459	40	-0.05	OK	0
050.99	Soluble K2O, Other (1%)	0501	1.225	0.0700	1.227	0.1503	0.0459	40	-0.01	OK	0
050.99	Soluble K2O, Other (1%)	0559	1.235	0.0100	1.227	0.1503	0.0459	40	0.05	OK	0
050.99	Soluble K2O, Other (1%)	0389	1.240	0.2400	1.227	0.1503	0.0459	40	0.09	OK	0
050.99	Soluble K2O, Other (1%)	0421	1.250	0.0200	1.227	0.1503	0.0459	40	0.15	OK	0
050.99	Soluble K2O, Other (1%)	0220	1.255	0.0900	1.227	0.1503	0.0459	40	0.18	OK	0
050.99	Soluble K2O, Other (1%)	0518	1.255	0.0500	1.227	0.1503	0.0459	40	0.18	OK	0
050.99	Soluble K2O, Other (1%)	0255	1.257	0.0010	1.227	0.1503	0.0459	40	0.19	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				
050.99	Soluble K2O, Other (1%)	0572	1.270	0.1200	1.227	0.1503	0.0459	40	0.28	OK	0
050.99	Soluble K2O, Other (1%)	0177	1.284	0.0038	1.227	0.1503	0.0459	40	0.38	OK	0
050.99	Soluble K2O, Other (1%)	0042	1.300	0.2000	1.227	0.1503	0.0459	40	0.48	OK	0
050.99	Soluble K2O, Other (1%)	0515	1.317	0.1120	1.227	0.1503	0.0459	40	0.60	OK	0
050.99	Soluble K2O, Other (1%)	0027	1.320	0.0800	1.227	0.1503	0.0459	40	0.62	OK	0
050.99	Soluble K2O, Other (1%)	0563	1.329	0.0194	1.227	0.1503	0.0459	40	0.68	OK	0
050.99	Soluble K2O, Other (1%)	0553	1.335	0.0100	1.227	0.1503	0.0459	40	0.72	OK	0
050.99	Soluble K2O, Other (1%)	0524	1.341	0.0187	1.227	0.1503	0.0459	40	0.76	OK	0
050.99	Soluble K2O, Other (1%)	0234	1.345	0.0268	1.227	0.1503	0.0459	40	0.79	OK	0
050.99	Soluble K2O, Other (1%)	0260	1.390	0.0200	1.227	0.1503	0.0459	40	1.08	OK	0
050.99	Soluble K2O, Other (1%)	0527	1.392	0.0040	1.227	0.1503	0.0459	40	1.09	OK	0
050.99	Soluble K2O, Other (1%)	0552	1.485	0.0300	1.227	0.1503	0.0459	40	1.72	OK	0
050.99	Soluble K2O, Other (1%)	0521	1.583	0.0000	1.227	0.1503	0.0459	40	2.37	OK	0
050.99	Soluble K2O, Other (1%)	0532	1.700	0.2000	1.227	0.1503	0.0459	40	3.15	High	0
050.99	Soluble K2O, Other (1%)	0433	1.780	0.0200	1.227	0.1503	0.0459	40	3.68	High	0
050.99	Soluble K2O, Other (1%)	0325	1.250	0.7000	1.227	0.1503	0.0459	40	0.15	OK	1
060.10	Water (Free), Vacuum Desiccation (%)	0419	7.040	0.0000				1			0
060.99	Water (Free), Other (%)	0009	11.00	0.0000				1			0
101.00	Acid Soluble Ca, AA, inorganic 965.09 (%)	0553	3.520	0.0800				1			0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0568	3.360	0.0200	3.424	0.0763	0.0925	4	-0.84		0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0354	3.365	0.0700	3.424	0.0763	0.0925	4	-0.77		0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0102	3.450	0.0800	3.424	0.0763	0.0925	4	0.34		0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0035	3.520	0.2000	3.424	0.0763	0.0925	4	1.26		0
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	0423	3.522	0.0080				1			0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0009	3.050	0.1000	3.336	0.2097	0.0582	6	-1.21	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0472	3.210	0.0000	3.336	0.2097	0.0582	6	-0.53	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0563	3.311	0.0169	3.336	0.2097	0.0582	6	-0.11	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0419	3.405	0.0900	3.336	0.2097	0.0582	6	0.29	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0527	3.503	0.0213	3.336	0.2097	0.0582	6	0.71	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0494	3.536	0.1212	3.336	0.2097	0.0582	6	0.85	OK	0
101.99	Acid Soluble Ca, Other (%)	0552	3.510	0.0200	3.542	0.0506	0.0300	3	-0.63		0
101.99	Acid Soluble Ca, Other (%)	0519	3.515	0.0300	3.542	0.0506	0.0300	3	-0.53		0
101.99	Acid Soluble Ca, Other (%)	0389	3.600	0.0400	3.542	0.0506	0.0300	3	1.15		0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (%)	0553	0.2660	0.0060				1			0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0354	0.2300	0.0000	0.2516	0.0299	0.0053	4	-0.72		0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0568	0.2335	0.0010	0.2516	0.0299	0.0053	4	-0.61		0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0035	0.2480	0.0100	0.2516	0.0299	0.0053	4	-0.12		0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0102	0.2950	0.0100	0.2516	0.0299	0.0053	4	1.45		0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (%)	0423	0.2445	0.0030				1			0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0515	0.1888	0.0010	0.2321	0.0274	0.0057	7	-1.43	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0472	0.2150	0.0100	0.2321	0.0274	0.0057	7	-0.57	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0009	0.2250	0.0100	0.2321	0.0274	0.0057	7	-0.24	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0494	0.2315	0.0019	0.2321	0.0274	0.0057	7	-0.02	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0563	0.2515	0.0046	0.2321	0.0274	0.0057	7	0.64	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0419	0.2550	0.0100	0.2321	0.0274	0.0057	7	0.76	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0527	0.2559	0.0026	0.2321	0.0274	0.0057	7	0.79	OK	0
121.99	Acid Soluble Mg, Other (%)	0524	0.1975	0.0007	0.2471	0.0466	0.0238	5	-1.07		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				
121.99	Acid Soluble Mg, Other (%)	0515	0.2065	0.0715	0.2471	0.0466	0.0238	5	-0.87		0
121.99	Acid Soluble Mg, Other (%)	0519	0.2500	0.0200	0.2471	0.0466	0.0238	5	0.06		0
121.99	Acid Soluble Mg, Other (%)	0389	0.2715	0.0070	0.2471	0.0466	0.0238	5	0.52		0
121.99	Acid Soluble Mg, Other (%)	0552	0.3100	0.0200	0.2471	0.0466	0.0238	5	1.35		0
143.99	Elemental S, Other (%)	0389	0.9300	0.0200				1			0
145.99	Sulfate S, HCl soluble, Other (%)	0553	0.2210	0.0080				1			0
148.04	Total S, ICP, w/Br digestion (%)	0419	0.7925	0.0030				1			0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0472	0.7850	0.0100	0.8523	0.0565	0.0139	5	-1.04		0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0563	0.8097	0.0115	0.8523	0.0565	0.0139	5	-0.66		0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0494	0.8518	0.0339	0.8523	0.0565	0.0139	5	-0.01		0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0102	0.8950	0.0100	0.8523	0.0565	0.0139	5	0.66		0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0527	0.9201	0.0043	0.8523	0.0565	0.0139	5	1.05		0
148.07	Total S, ICP, test portion as in 2017.02 (%)	0515	0.6710	0.2176	0.8523	0.0565	0.0139	5	-2.80		1
148.99	Total S, Other (%)	0354	0.7100	0.0000				1			0
149.04	S - HNO3 soluble, ICP (%)	0524	0.7660	0.0145	0.8105	0.0422	0.0132	3	-1.05		0
149.04	S - HNO3 soluble, ICP (%)	0423	0.8155	0.0050	0.8105	0.0422	0.0132	3	0.12		0
149.04	S - HNO3 soluble, ICP (%)	0519	0.8500	0.0200	0.8105	0.0422	0.0132	3	0.94		0
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid (ppm)	0534	0.2750	0.0300				1			0
151.30	Acid Soluble As, ICP (ppm)	0389	0.3750	0.0100	0.4872	0.0863	0.0186	4	-1.10		0
151.30	Acid Soluble As, ICP (ppm)	0523	0.4650	0.0100	0.4872	0.0863	0.0186	4	-0.22		0
151.30	Acid Soluble As, ICP (ppm)	0524	0.5440	0.0265	0.4872	0.0863	0.0186	4	0.56		0
151.30	Acid Soluble As, ICP (ppm)	0476	0.5650	0.0280	0.4872	0.0863	0.0186	4	0.76		0
151.30	Acid Soluble As, ICP (ppm)	0255	0.0000	0.0000	0.4872	0.0863	0.0186	4			4
151.30	Acid Soluble As, ICP (ppm)	0450	< 0.5		0.4872	0.0863	0.0186	4			5
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	0220	0.6500	0.1000				1			0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0548	0.4200	0.0200	1.519	1.294	0.7933	4	-0.72		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0563	0.5925	0.0074	1.519	1.294	0.7933	4	-0.61		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0515	1.860	2.696	1.519	1.294	0.7933	4	0.22		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0494	3.205	0.4500	1.519	1.294	0.7933	4	1.10		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0527	< 0.0001		1.519	1.294	0.7933	4			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0136	< 1		1.519	1.294	0.7933	4			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0009	< 5		1.519	1.294	0.7933	4			5
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0515	2.183	4.365				0			4
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0368	< 0.3					0			5
151.99	Acid Soluble As, Other (ppm)	0519	0.3250	0.0100	1.132	1.076	0.2920	5	-0.65		0
151.99	Acid Soluble As, Other (ppm)	0009	0.4700	0.0000	1.132	1.076	0.2920	5	-0.54		0
151.99	Acid Soluble As, Other (ppm)	0220	0.5000	0.2000	1.132	1.076	0.2920	5	-0.51		0
151.99	Acid Soluble As, Other (ppm)	0405	1.500	1.000	1.132	1.076	0.2920	5	0.30		0
151.99	Acid Soluble As, Other (ppm)	0576	2.865	0.2500	1.132	1.076	0.2920	5	1.41		0
151.99	Acid Soluble As, Other (ppm)	0572	< 0.34		1.132	1.076	0.2920	5			5
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0354	< 0.01					0			5
165.99	Acid Soluble B, Other (%)	0515	0.0032	0.0004	0.0043	0.0010	0.0001	6	-0.99	OK	0
165.99	Acid Soluble B, Other (%)	0527	0.0038	0.0001	0.0043	0.0010	0.0001	6	-0.49	OK	0
165.99	Acid Soluble B, Other (%)	0524	0.0041	0.0000	0.0043	0.0010	0.0001	6	-0.17	OK	0
165.99	Acid Soluble B, Other (%)	0009	0.0044	0.0000	0.0043	0.0010	0.0001	6	0.11	OK	0
165.99	Acid Soluble B, Other (%)	0563	0.0045	0.0002	0.0043	0.0010	0.0001	6	0.20	OK	0
165.99	Acid Soluble B, Other (%)	0472	0.0100	0.0000	0.0043	0.0010	0.0001	6	5.25	High	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 (%)	0423	44.41	0.1600	0.0043	0.0010	0.0001	6	40730.31	High	2
165.99	Acid Soluble B, Other (%)	0552	0.0000	0.0000	0.0043	0.0010	0.0001	6			4
171.99	Water Soluble B, Other (%)	0519	0.0148	0.0002				1			0
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	0534	< 0.5					0			5
181.30	Acid Soluble Cd, ICP (ppm)	0389	0.0700	0.0000	0.1946	0.0620	0.0129	6	-1.79	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0524	0.1828	0.0167	0.1946	0.0620	0.0129	6	-0.17	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0476	0.1870	0.0440	0.1946	0.0620	0.0129	6	-0.11	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0450	0.2000	0.0000	0.1946	0.0620	0.0129	6	0.08	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0523	0.2085	0.0066	0.1946	0.0620	0.0129	6	0.20	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0419	0.2850	0.0100	0.1946	0.0620	0.0129	6	1.30	NA	0
181.30	Acid Soluble Cd, ICP (ppm)	0255	2.958	3.602	0.1946	0.0620	0.0129	6	39.67	NA	1
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	0220	0.3000	0.0000				1			0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0563	0.2505	0.0035				2			0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0548	0.4150	0.0300				2			0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0527	< 0.0001					2			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0494	< 0.17					2			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0136	< 1					2			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0009	< 2					2			5
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	0368	0.2500	0.1000				1			0
181.99	Acid Soluble Cd, Other (ppm)	0519	0.1855	0.0010	0.2621	0.0854	0.0262	5	-0.90		0
181.99	Acid Soluble Cd, Other (ppm)	0009	0.2100	0.0200	0.2621	0.0854	0.0262	5	-0.61		0
181.99	Acid Soluble Cd, Other (ppm)	0405	0.2300	0.0200	0.2621	0.0854	0.0262	5	-0.38		0
181.99	Acid Soluble Cd, Other (ppm)	0572	0.2850	0.0900	0.2621	0.0854	0.0262	5	0.27		0
181.99	Acid Soluble Cd, Other (ppm)	0220	0.4000	0.0000	0.2621	0.0854	0.0262	5	1.62		0
190.00	Water Soluble Cl, Titrimetric (%)	0553	0.7450	0.0100				1			0
191.30	Acid Soluble Cr, ICP (ppm)	0035	18.95	6.500	59.53	30.34	3.497	8	-1.22	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0389	31.61	0.1600	59.53	30.34	3.497	8	-0.84	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0524	42.40	0.9376	59.53	30.34	3.497	8	-0.52	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0444	59.97	3.620	59.53	30.34	3.497	8	0.01	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0419	66.40	9.600	59.53	30.34	3.497	8	0.21	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0476	75.14	2.957	59.53	30.34	3.497	8	0.47	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0523	86.76	0.2000	59.53	30.34	3.497	8	0.82	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0450	95.00	4.000	59.53	30.34	3.497	8	1.07	NA	0
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	0220	49.00	4.000				1			0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0136	37.40	3.600	60.24	20.51	1.750	5	-0.97		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0527	39.43	0.3918	60.24	20.51	1.750	5	-0.89		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0563	68.35	0.7763	60.24	20.51	1.750	5	0.35		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0548	73.99	1.980	60.24	20.51	1.750	5	0.59		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0009	82.00	2.000	60.24	20.51	1.750	5	0.93		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0515	69.99	11.73	60.24	20.51	1.750	5	0.41		1
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0494	< 0.92		60.24	20.51	1.750	5			5
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0368	23.35	1.500				2			0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0515	59.38	7.808				2			0
191.99	Acid Soluble Cr, Other (ppm)	0519	6.025	0.0500	55.35	29.00	2.274	5	-1.70		0
191.99	Acid Soluble Cr, Other (ppm)	0572	57.24	4.320	55.35	29.00	2.274	5	0.07		0
191.99	Acid Soluble Cr, Other (ppm)	0405	65.00	0.0000	55.35	29.00	2.274	5	0.33		0
191.99	Acid Soluble Cr, Other (ppm)	0220	66.50	3.000	55.35	29.00	2.274	5	0.38		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				
191.99	Acid Soluble Cr, Other (ppm)	0009	82.00	4.000	55.35	29.00	2.274	5	0.92		0
202.30	Acid Soluble Co, ICP (ppm)	0035	9.935	2.930	32.01	18.41	1.256	6	-1.07	Low	0
202.30	Acid Soluble Co, ICP (ppm)	0419	18.10	0.6000	32.01	18.41	1.256	6	-0.67	Low	0
202.30	Acid Soluble Co, ICP (ppm)	0389	26.72	0.4400	32.01	18.41	1.256	6	-0.26	OK	0
202.30	Acid Soluble Co, ICP (ppm)	0476	43.04	2.313	32.01	18.41	1.256	6	0.53	High	0
202.30	Acid Soluble Co, ICP (ppm)	0524	43.32	0.8312	32.01	18.41	1.256	6	0.55	High	0
202.30	Acid Soluble Co, ICP (ppm)	0523	50.97	0.4200	32.01	18.41	1.256	6	0.92	High	0
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0220	11.40	1.600				2			0
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0423	40.30	1.360				2			0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0136	8.245	0.4500	37.22	14.58	4.387	7	-1.80	Low	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0527	27.67	0.6422	37.22	14.58	4.387	7	-0.59	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0515	30.99	14.48	37.22	14.58	4.387	7	-0.39	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0563	43.55	0.7455	37.22	14.58	4.387	7	0.39	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0548	44.86	3.190	37.22	14.58	4.387	7	0.47	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0009	47.50	9.000	37.22	14.58	4.387	7	0.64	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0494	50.60	2.200	37.22	14.58	4.387	7	0.83	High	0
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0368	6.200	0.8000				2			0
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0515	17.91	10.61				2			0
202.99	Acid Soluble Co, Other (ppm)	0572	16.18	2.920	35.74	16.78	2.158	5	-1.17		0
202.99	Acid Soluble Co, Other (ppm)	0220	26.95	0.9000	35.74	16.78	2.158	5	-0.52		0
202.99	Acid Soluble Co, Other (ppm)	0405	30.05	0.3000	35.74	16.78	2.158	5	-0.34		0
202.99	Acid Soluble Co, Other (ppm)	0009	47.50	5.000	35.74	16.78	2.158	5	0.70		0
202.99	Acid Soluble Co, Other (ppm)	0255	58.02	1.670	35.74	16.78	2.158	5	1.33		0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	0534	0.0135	0.0010				2			0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	0553	0.0175	0.0010				2			0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0402	0.0101	0.0016	0.0180	0.0024	0.0005	9	-3.10	Low	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0234	0.0156	0.0002	0.0180	0.0024	0.0005	9	-0.95	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0035	0.0174	0.0003	0.0180	0.0024	0.0005	9	-0.27	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0255	0.0175	0.0010	0.0180	0.0024	0.0005	9	-0.21	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0433	0.0175	0.0010	0.0180	0.0024	0.0005	9	-0.21	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0102	0.0200	0.0000	0.0180	0.0024	0.0005	9	0.76	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0231	0.0200	0.0000	0.0180	0.0024	0.0005	9	0.76	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0444	0.0200	0.0000	0.0180	0.0024	0.0005	9	0.76	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0552	0.0200	0.0000	0.0180	0.0024	0.0005	9	0.76	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0354	< 0.01		0.0180	0.0024	0.0005	9			5
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	0220	0.0166	0.0002				2			0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	0423	175.1	3.100				2			0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0548	0.0125	0.0050	0.0168	0.0024	0.0010	11	-1.81	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0136	0.0148	0.0000	0.0168	0.0024	0.0010	11	-0.85	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0515	0.0148	0.0004	0.0168	0.0024	0.0010	11	-0.85	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0009	0.0160	0.0000	0.0168	0.0024	0.0010	11	-0.35	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0106	0.0162	0.0002	0.0168	0.0024	0.0010	11	-0.27	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0563	0.0167	0.0002	0.0168	0.0024	0.0010	11	-0.06	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0260	0.0172	0.0005	0.0168	0.0024	0.0010	11	0.13	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0527	0.0184	0.0003	0.0168	0.0024	0.0010	11	0.63	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0043	0.0185	0.0010	0.0168	0.0024	0.0010	11	0.69	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0419	0.0195	0.0030	0.0168	0.0024	0.0010	11	1.11	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				
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0472	0.0200	0.0000	0.0168	0.0024	0.0010	11	1.32	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0494	0.0397	0.0369	0.0168	0.0024	0.0010	11	9.53	High	1
221.99	Acid Soluble Cu, Other (%)	0476	0.0140	0.0000	0.0161	0.0016	0.0002	10	-1.19	OK	0
221.99	Acid Soluble Cu, Other (%)	0515	0.0144	0.0001	0.0161	0.0016	0.0002	10	-0.99	OK	0
221.99	Acid Soluble Cu, Other (%)	0524	0.0148	0.0000	0.0161	0.0016	0.0002	10	-0.72	OK	0
221.99	Acid Soluble Cu, Other (%)	0368	0.0155	0.0002	0.0161	0.0016	0.0002	10	-0.32	OK	0
221.99	Acid Soluble Cu, Other (%)	0506	0.0160	0.0000	0.0161	0.0016	0.0002	10	-0.03	OK	0
221.99	Acid Soluble Cu, Other (%)	0220	0.0165	0.0003	0.0161	0.0016	0.0002	10	0.23	OK	0
221.99	Acid Soluble Cu, Other (%)	0009	0.0165	0.0010	0.0161	0.0016	0.0002	10	0.26	OK	0
221.99	Acid Soluble Cu, Other (%)	0405	0.0170	0.0005	0.0161	0.0016	0.0002	10	0.52	OK	0
221.99	Acid Soluble Cu, Other (%)	0572	0.0175	0.0002	0.0161	0.0016	0.0002	10	0.84	OK	0
221.99	Acid Soluble Cu, Other (%)	0389	0.0200	0.0000	0.0161	0.0016	0.0002	10	2.29	OK	0
221.99	Acid Soluble Cu, Other (%)	0519	34.03	0.0500	0.0161	0.0016	0.0002	10	19701.19	High	2
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	0553	0.2060	0.0000				1			0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0444	0.2400	0.0200	0.3810	0.2495	0.0120	5	-0.57		0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0354	0.2500	0.0000	0.3810	0.2495	0.0120	5	-0.53		0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0102	0.2900	0.0000	0.3810	0.2495	0.0120	5	-0.36		0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0552	0.3000	0.0000	0.3810	0.2495	0.0120	5	-0.32		0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0035	0.8250	0.0400	0.3810	0.2495	0.0120	5	1.78		0
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (%)	0423	2.685	20.60				1			0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0472	0.2000	0.0000	0.2584	0.0265	0.0014	6	-1.96	Low	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0419	0.2480	0.0020	0.2584	0.0265	0.0014	6	-0.35	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0009	0.2600	0.0000	0.2584	0.0265	0.0014	6	0.05	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0563	0.2622	0.0007	0.2584	0.0265	0.0014	6	0.13	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0494	0.2777	0.0033	0.2584	0.0265	0.0014	6	0.65	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0527	0.2840	0.0024	0.2584	0.0265	0.0014	6	0.86	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0515	0.2563	0.0159	0.2584	0.0265	0.0014	6	-0.07	OK	1
241.99	Acid Soluble Fe, Other (%)	0515	0.2134	0.0037	0.2346	0.0152	0.0033	4	-1.40		0
241.99	Acid Soluble Fe, Other (%)	0519	0.2345	0.0010	0.2346	0.0152	0.0033	4	-0.01		0
241.99	Acid Soluble Fe, Other (%)	0524	0.2432	0.0073	0.2346	0.0152	0.0033	4	0.56		0
241.99	Acid Soluble Fe, Other (%)	0389	0.2475	0.0010	0.2346	0.0152	0.0033	4	0.85		0
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	0534	< 2					0			5
251.30	Acid Soluble Pb, ICP (ppm)	0389	1.435	0.0900	2.285	0.6126	0.1124	7	-1.25	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0476	2.004	0.2170	2.285	0.6126	0.1124	7	-0.42	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0524	2.030	0.2080	2.285	0.6126	0.1124	7	-0.38	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0444	2.200	0.1600	2.285	0.6126	0.1124	7	-0.13	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0523	2.457	0.0320	2.285	0.6126	0.1124	7	0.25	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0450	2.900	0.0000	2.285	0.6126	0.1124	7	0.91	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0035	2.970	0.0800	2.285	0.6126	0.1124	7	1.01	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0419	3.315	0.6500	2.285	0.6126	0.1124	7	1.52	NA	1
251.30	Acid Soluble Pb, ICP (ppm)	0255	0.0000	0.0000	2.285	0.6126	0.1124	7			4
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	0220	1.700	0.4000				1			0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0548	2.680	0.2000	17.66	29.81	20.88	4	-0.43		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0527	2.779	0.0017	17.66	29.81	20.88	4	-0.42		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0563	2.802	0.0079	17.66	29.81	20.88	4	-0.42		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0515	62.37	83.33	17.66	29.81	20.88	4	1.27		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0494	< 0.91		17.66	29.81	20.88	4			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				
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0136	< 3		17.66	29.81	20.88	4			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0009	< 6		17.66	29.81	20.88	4			5
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0515	6.385	0.5850				1			0
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0368	< 0.6					1			5
251.99	Acid Soluble Pb, Other (ppm)	0519	1.535	0.0300	2.239	0.5201	0.0375	4	-1.35		0
251.99	Acid Soluble Pb, Other (ppm)	0009	2.200	0.0000	2.239	0.5201	0.0375	4	-0.07		0
251.99	Acid Soluble Pb, Other (ppm)	0572	2.470	0.0200	2.239	0.5201	0.0375	4	0.44		0
251.99	Acid Soluble Pb, Other (ppm)	0405	2.750	0.1000	2.239	0.5201	0.0375	4	0.98		0
251.99	Acid Soluble Pb, Other (ppm)	0220	< 1		2.239	0.5201	0.0375	4			5
261.00	Acid Soluble Mn, AA, Mn2+ only (%)	0553	0.0210	0.0000				1			0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0035	0.0191	0.0008				1			0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0354	< 0.01					1			5
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (%)	0552	0.0350	0.0100				1			0
261.34	Acid Soluble Mn, ICP, test portion 2006.03A-C (%)	0423	210.1	2.100				1			0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0009	0.0190	0.0000	0.0198	0.0008	0.0002	5	-0.95		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0563	0.0193	0.0002	0.0198	0.0008	0.0002	5	-0.60		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0527	0.0199	0.0003	0.0198	0.0008	0.0002	5	0.03		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0472	0.0200	0.0000	0.0198	0.0008	0.0002	5	0.21		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0494	0.0210	0.0005	0.0198	0.0008	0.0002	5	1.31		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0419	0.0200	0.0020	0.0198	0.0008	0.0002	5	0.21		1
261.99	Acid Soluble Mn, Other (%)	0519	0.0135	0.0030	0.0169	0.0028	0.0011	4	-1.20		0
261.99	Acid Soluble Mn, Other (%)	0515	0.0159	0.0013	0.0169	0.0028	0.0011	4	-0.37		0
261.99	Acid Soluble Mn, Other (%)	0524	0.0183	0.0001	0.0169	0.0028	0.0011	4	0.48		0
261.99	Acid Soluble Mn, Other (%)	0389	0.0200	0.0000	0.0169	0.0028	0.0011	4	1.09		0
281.00	Acid Soluble Hg, AA (ppm)	0534	< 0.05					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0476	0.1110	0.0380				1			0
281.30	Acid Soluble Hg, ICP (ppm)	0515	0.0000	0.0000				1			4
281.30	Acid Soluble Hg, ICP (ppm)	0527	< 0.0001					1			5
281.30	Acid Soluble Hg, ICP (ppm)	0450	< 0.5					1			5
281.99	Acid Soluble Hg, Other (ppm)	0368	0.0045	0.0006	0.0088	0.0044	0.0032	4	-0.83		0
281.99	Acid Soluble Hg, Other (ppm)	0524	0.0064	0.0011	0.0088	0.0044	0.0032	4	-0.48		0
281.99	Acid Soluble Hg, Other (ppm)	0519	0.0100	0.0000	0.0088	0.0044	0.0032	4	0.22		0
281.99	Acid Soluble Hg, Other (ppm)	0035	0.0145	0.0110	0.0088	0.0044	0.0032	4	1.09		0
281.99	Acid Soluble Hg, Other (ppm)	0572	< 0.008		0.0088	0.0044	0.0032	4			5
281.99	Acid Soluble Hg, Other (ppm)	0220	< 0.01		0.0088	0.0044	0.0032	4			5
281.99	Acid Soluble Hg, Other (ppm)	0405	< 0.01		0.0088	0.0044	0.0032	4			5
281.99	Acid Soluble Hg, Other (ppm)	0009	< 0.044		0.0088	0.0044	0.0032	4			5
289.30	Acid Soluble Mo, ICP (ppm)	0519	0.0100	0.0000	4.790	1.805	0.2882	8	-2.42	Low	0
289.30	Acid Soluble Mo, ICP (ppm)	0035	2.625	0.6500	4.790	1.805	0.2882	8	-1.10	OK	0
289.30	Acid Soluble Mo, ICP (ppm)	0524	4.758	0.0771	4.790	1.805	0.2882	8	-0.02	OK	0
289.30	Acid Soluble Mo, ICP (ppm)	0255	5.416	0.0030	4.790	1.805	0.2882	8	0.32	OK	0
289.30	Acid Soluble Mo, ICP (ppm)	0433	5.500	1.000	4.790	1.805	0.2882	8	0.36	OK	0
289.30	Acid Soluble Mo, ICP (ppm)	0419	5.525	0.0700	4.790	1.805	0.2882	8	0.37	OK	0
289.30	Acid Soluble Mo, ICP (ppm)	0476	5.844	0.4830	4.790	1.805	0.2882	8	0.53	OK	0
289.30	Acid Soluble Mo, ICP (ppm)	0523	6.569	0.0223	4.790	1.805	0.2882	8	0.90	OK	0
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	0220	4.650	0.1000				1			0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0527	3.463	0.2526	6.049	0.8158	0.2045	7	-2.87	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				
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0423	5.425	0.4300	6.049	0.8158	0.2045	7	-0.69	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0548	6.035	0.0300	6.049	0.8158	0.2045	7	-0.02	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0009	6.200	0.2000	6.049	0.8158	0.2045	7	0.17	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0563	6.393	0.3286	6.049	0.8158	0.2045	7	0.38	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0494	6.465	0.1900	6.049	0.8158	0.2045	7	0.46	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0106	7.000	0.0000	6.049	0.8158	0.2045	7	1.05	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0515	2.090	3.175	6.049	0.8158	0.2045	7	-4.39	Low	1
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0136	< 5		6.049	0.8158	0.2045	7			5
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	0368	4.400	0.2000				2			0
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	0515	6.486	7.985				2			0
289.99	Acid Soluble Mo, Other (ppm)	0220	6.050	0.5000	6.347	0.3287	0.3133	3	-0.90		0
289.99	Acid Soluble Mo, Other (ppm)	0405	6.290	0.0400	6.347	0.3287	0.3133	3	-0.17		0
289.99	Acid Soluble Mo, Other (ppm)	0009	6.700	0.4000	6.347	0.3287	0.3133	3	1.07		0
291.30	Acid Soluble Ni, ICP (ppm)	0035	12.49	5.030	30.21	6.343	1.862	7	-2.53	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0524	26.88	0.0444	30.21	6.343	1.862	7	-0.47	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0444	27.44	1.510	30.21	6.343	1.862	7	-0.40	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0476	30.82	1.399	30.21	6.343	1.862	7	0.09	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0450	34.00	4.000	30.21	6.343	1.862	7	0.54	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0419	35.25	0.4000	30.21	6.343	1.862	7	0.72	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0523	36.41	0.6500	30.21	6.343	1.862	7	0.88	NA	0
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	0220	30.00	2.000				1			0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0527	17.98	0.0235	29.90	9.038	0.8762	5	-1.15		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0136	22.40	2.000	29.90	9.038	0.8762	5	-0.72		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0548	35.08	0.3100	29.90	9.038	0.8762	5	0.50		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0009	37.00	2.000	29.90	9.038	0.8762	5	0.69		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0563	37.05	0.0474	29.90	9.038	0.8762	5	0.69		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0515	30.21	7.450	29.90	9.038	0.8762	5	0.03		1
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0494	< 0.37		29.90	9.038	0.8762	5			5
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0368	14.80	0.6000				2			0
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0515	32.97	6.456				2			0
291.99	Acid Soluble Ni, Other (ppm)	0519	7.097	0.0040	35.29	10.17	1.557	6	-2.47	NA	0
291.99	Acid Soluble Ni, Other (ppm)	0572	33.65	2.440	35.29	10.17	1.557	6	-0.14	NA	0
291.99	Acid Soluble Ni, Other (ppm)	0405	34.50	1.000	35.29	10.17	1.557	6	-0.07	NA	0
291.99	Acid Soluble Ni, Other (ppm)	0009	36.50	1.000	35.29	10.17	1.557	6	0.11	NA	0
291.99	Acid Soluble Ni, Other (ppm)	0220	36.50	1.000	35.29	10.17	1.557	6	0.11	NA	0
291.99	Acid Soluble Ni, Other (ppm)	0255	53.71	3.900	35.29	10.17	1.557	6	1.61	NA	0
301.30	Acid Soluble Se, ICP (ppm)	0389	0.3850	0.0100	1.176	0.6430	0.0467	4	-1.23		0
301.30	Acid Soluble Se, ICP (ppm)	0523	1.014	0.0471	1.176	0.6430	0.0467	4	-0.25		0
301.30	Acid Soluble Se, ICP (ppm)	0524	1.392	0.0957	1.176	0.6430	0.0467	4	0.34		0
301.30	Acid Soluble Se, ICP (ppm)	0476	1.912	0.0340	1.176	0.6430	0.0467	4	1.14		0
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	0220	0.3000	0.0000				1			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0548	0.0300	0.0400	1.283	1.234	1.541	3	-0.82		0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0563	1.322	0.0224	1.283	1.234	1.541	3	0.03		0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0515	2.496	4.560	1.283	1.234	1.541	3	0.80		0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0527	< 0.001		1.283	1.234	1.541	3			5
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0494	< 0.96		1.283	1.234	1.541	3			5
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0009	< 22		1.283	1.234	1.541	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				
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0515	6.458	7.130				1			0
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0368	< 1.1					1			5
301.99	Acid Soluble Se, Other (ppm)	0519	0.7455	0.0010	1.424	1.057	0.0253	4	-0.54		0
301.99	Acid Soluble Se, Other (ppm)	0572	0.9500	0.1000	1.424	1.057	0.0253	4	-0.38		0
301.99	Acid Soluble Se, Other (ppm)	0009	1.000	0.0000	1.424	1.057	0.0253	4	-0.34		0
301.99	Acid Soluble Se, Other (ppm)	0405	3.000	0.0000	1.424	1.057	0.0253	4	1.27		0
301.99	Acid Soluble Se, Other (ppm)	0255	0.0000	0.0000	1.424	1.057	0.0253	4			4
301.99	Acid Soluble Se, Other (ppm)	0220	< 0.3		1.424	1.057	0.0253	4			5
311.00	Sodium, AA (%)	0553	0.5525	0.0050				1			0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0009	0.7250	0.0100	0.7778	0.0462	0.0064	6	-1.02	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0035	0.7515	0.0050	0.7778	0.0462	0.0064	6	-0.51	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0563	0.7639	0.0026	0.7778	0.0462	0.0064	6	-0.27	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0423	0.7750	0.0040	0.7778	0.0462	0.0064	6	-0.05	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0419	0.8200	0.0000	0.7778	0.0462	0.0064	6	0.81	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0527	0.8311	0.0166	0.7778	0.0462	0.0064	6	1.03	OK	0
311.99	Sodium, Other (%)	0519	0.3910	0.0020				2			0
311.99	Sodium, Other (%)	0354	0.7500	0.0400				2			0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0534	0.0155	0.0010				2			0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0553	0.0235	0.0010				2			0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0402	0.0173	0.0008	0.0209	0.0016	0.0010	9	-2.05	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0102	0.0200	0.0000	0.0209	0.0016	0.0010	9	-0.50	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0231	0.0200	0.0000	0.0209	0.0016	0.0010	9	-0.50	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0354	0.0200	0.0000	0.0209	0.0016	0.0010	9	-0.50	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0035	0.0211	0.0016	0.0209	0.0016	0.0010	9	0.13	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0255	0.0215	0.0010	0.0209	0.0016	0.0010	9	0.36	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0234	0.0216	0.0003	0.0209	0.0016	0.0010	9	0.38	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0444	0.0220	0.0020	0.0209	0.0016	0.0010	9	0.64	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0433	0.0265	0.0030	0.0209	0.0016	0.0010	9	3.22	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0552	0.1150	0.0300	0.0209	0.0016	0.0010	9	53.84	High	1
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0450	< 0.5		0.0209	0.0016	0.0010	9			5
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0220	0.0216	0.0006				2			0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0423	243.8	2.600				2			0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0106	0.0175	0.0001	0.0200	0.0019	0.0007	11	-1.40	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0136	0.0180	0.0000	0.0200	0.0019	0.0007	11	-1.10	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0515	0.0189	0.0002	0.0200	0.0019	0.0007	11	-0.61	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0494	0.0193	0.0043	0.0200	0.0019	0.0007	11	-0.42	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0260	0.0198	0.0000	0.0200	0.0019	0.0007	11	-0.13	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0009	0.0200	0.0000	0.0200	0.0019	0.0007	11	-0.02	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0472	0.0200	0.0000	0.0200	0.0019	0.0007	11	-0.02	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0527	0.0206	0.0005	0.0200	0.0019	0.0007	11	0.28	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0563	0.0220	0.0001	0.0200	0.0019	0.0007	11	1.03	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0419	0.0220	0.0020	0.0200	0.0019	0.0007	11	1.06	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0043	0.0225	0.0010	0.0200	0.0019	0.0007	11	1.33	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0548	0.0250	0.0100	0.0200	0.0019	0.0007	11	2.68	OK	1
321.99	Acid Soluble Zn, Other (%)	0476	0.0175	0.0010	0.0205	0.0021	0.0007	9	-1.33	OK	0
321.99	Acid Soluble Zn, Other (%)	0515	0.0191	0.0008	0.0205	0.0021	0.0007	9	-0.61	OK	0
321.99	Acid Soluble Zn, Other (%)	0506	0.0195	0.0010	0.0205	0.0021	0.0007	9	-0.43	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				
321.99	Acid Soluble Zn, Other (%)	0405	0.0200	0.0006	0.0205	0.0021	0.0007	9	-0.21	OK	0
321.99	Acid Soluble Zn, Other (%)	0572	0.0204	0.0013	0.0205	0.0021	0.0007	9	-0.05	OK	0
321.99	Acid Soluble Zn, Other (%)	0524	0.0204	0.0006	0.0205	0.0021	0.0007	9	-0.03	OK	0
321.99	Acid Soluble Zn, Other (%)	0368	0.0213	0.0001	0.0205	0.0021	0.0007	9	0.35	OK	0
321.99	Acid Soluble Zn, Other (%)	0220	0.0226	0.0009	0.0205	0.0021	0.0007	9	0.94	OK	0
321.99	Acid Soluble Zn, Other (%)	0519	0.0700	0.0000	0.0205	0.0021	0.0007	9	22.23	High	0
321.99	Acid Soluble Zn, Other (%)	0389	0.0250	0.0080	0.0205	0.0021	0.0007	9	2.03	OK	1
325.00	Water Soluble Zn, AA (%)	0576	0.0070	0.0020				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.