

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 190511

Grade 16-1-0

Statistical Summary

Methods: 143

Labs Reporting: 98

Issue Date : 06/30/2019

Method Code	Analyte & Method Sample # 190511	# 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 (%)	10	10	15.61	0.3474	15.61		0.3874	0.1531	2.48%		0.3096	2.64%
001.99	Ammoniacal N, Other (%)	25	24	15.94	0.7349	15.96		0.7528	0.1921	4.72%		0.1320	2.64%
003.10	Water Insoluble N, Method I (%)	4	4	1.034	0.3028	1.034		0.3028	0.1893	29.29%		0.2263	3.98%
003.99	Water Insoluble N, Other (%)	4	4	0.9561	0.1843	0.9561		0.1843	0.1152	19.27%		0.1363	4.03%
009.99	Ammoniacal Plus Nitrate N, Other (%)	1		14.95									
010.11	Total N, Modified Comprehensive (16%)	7	7	16.47	0.5273	16.47	0.6770	0.5979	0.2825	3.63%	2.06	0.0618	2.62%
010.12	Total N, Salicylic (16%)	3	3	16.41	1.244	16.41	0.6762	1.244	0.8975	7.58%	4.29	0.3400	2.63%
010.16	Total N, Raney (16%)	1		17.15									
010.17	Total N, Comprehensive (16%)	1		15.66									
010.60	Total N, Combustion (16%)	60	59	17.50	0.2521	17.50	0.6925	0.1984	0.0323	1.13%	0.67	0.1090	2.60%
010.99	Total N, Other (16%)	16	16	16.88	0.7081	16.89	0.6833	0.7912	0.2472	4.69%	2.70	0.1580	2.61%
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	2	2	1.178	0.0318								
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	18	16	1.329	0.1955	1.339		0.2011	0.0628	15.02%		0.0219	3.83%
020.40	Total P2O5, Automated (%)	3	3	1.183	0.2303	1.183		0.2303	0.1662	19.46%		0.0400	3.90%
020.50	Total P2O5, ICP (%)	24	23	1.312	0.1005	1.320		0.0904	0.0235	6.84%		0.0313	3.84%
020.99	Total P2O5, Other (%)	3	3	1.271	0.0222	1.271		0.0222	0.0160	1.75%		0.0242	3.86%
030.20	Citrate Insoluble P2O5, Spectrophotometric MolybdovanadoP (%)	1		0.1000									
030.40	Citrate Insoluble P2O5, Automated, test portion 963.03 A-B (%)	1		1.385									
040.20	Indirect Available P2O5, Spectrophotometric (1%)	2	2	1.318	0.1308								
040.40	Indirect Available P2O5, Automated (1%)	1		0.0350									
041.10	Direct Available P2O5, Gravimetric Quinolinium (1%)	3	3	1.181	0.0510	1.181	0.6700	0.0510	0.0368	4.32%	0.18	0.1300	3.90%
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (1%)	2	2	1.199	0.0262								
041.20	Direct Available P2O5, Spectrophotometric (1%)	2	2	0.8225	0.4349								
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (1%)	3	3	1.382	0.2324	1.382	0.6700	0.2324	0.1677	16.82%	0.81	0.0189	3.81%
041.40	Direct Available P2O5, Automated (1%)	2	2	1.280	0.0212								
041.50	Direct Available P2O5, ICP (1%)	5	5	1.280	0.1472	1.280	0.6700	0.1472	0.0823	11.50%	0.51	0.0342	3.85%
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	9	9	1.267	0.0770	1.267	0.6700	0.0873	0.0364	6.89%	0.30	0.0484	3.86%
041.60	Direct Available P2O5, Citrate-EDTA Ext. (1%)	8	7	1.112	0.3888	1.203	0.6700	0.1977	0.0934	16.43%	0.69	0.0274	3.89%
041.99	Direct Available P2O5, Other (1%)	11	11	1.234	0.4165	1.149	0.6700	0.1741	0.0656	15.15%	0.61	0.0611	3.92%
042.10	Water Soluble OrthoP As P2O5, Spectrophotometric (%)	1		0.0150									
048.20	Water Soluble P2O5, Spectrophotometric (%)	1		1.000									
048.40	Water Soluble P2O5, Automated (%)	1		0.0800									
048.99	Water Soluble P2O5, Other (%)	1		1.350									

Method Code	Analyte & Method Sample # 190511	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Method Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	Method IA Ratio	Average Range (R-bar)	Horwitz %RSD
050.00	Soluble K2O, STPB Oxalate (%)	1		0.0550									
050.30	Soluble K2O, AA (Oxalate) (%)	1		0.4050									
050.31	Soluble K2O, AA (Citrate) (%)	1		0.1750									
050.50	Soluble K2O, ICP (Oxalate) (%)	2	2	0.3735	0.0093								
050.51	Soluble K2O, ICP (Citrate) (%)	4	4	0.4829	0.1975	0.4829	0.4100	0.1975	0.1235	40.91%	1.12	0.0813	4.46%
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	3	3	0.4155	0.0104	0.4155	0.4100	0.0104	0.0075	2.50%	0.06	0.0150	4.56%
050.61	Soluble K2O, Flame Photometric (Citrate) (%)	1		0.0900									
050.99	Soluble K2O, Other (%)	11	9	0.4365	0.0256	0.4328	0.4100	0.0194	0.0081	4.49%	0.11	0.0194	4.54%
060.00	Water (Free), Vacuum Oven (%)	3	3	1.046	0.1450	1.046		0.1450	0.1046	13.86%		0.1684	3.97%
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours, 5g sample) (%)	3	3	1.072	0.2697	1.072		0.2697	0.1947	25.17%		0.0767	3.96%
060.99	Water (Free), Other (%)	3	3	1.198	0.2944	1.198		0.2944	0.2125	24.59%		0.0910	3.89%
101.00	Acid Soluble Ca, AA, inorganic 965.09 (%)	2	2	0.1473	0.0668								
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	8	8	0.3858	0.1041	0.3655	0.2183	0.0635	0.0281	17.38%	0.68	0.0156	4.65%
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	2	2	0.4384	0.0769								
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	3	3	0.4397	0.1657	0.4397	0.2220	0.1657	0.1196	37.68%	1.74	0.0477	4.53%
101.99	Acid Soluble Ca, Other (%)	2	2	0.3655	0.0064								
121.00	Acid Soluble Mg, AA, inorganic 965.09 (%)	2	2	0.1288	0.0301								
121.03	Acid Soluble Mg, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	1		0.1065									
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	7	7	0.1525	0.0348	0.1497	0.2075	0.0326	0.0154	21.77%	0.37	0.0067	5.32%
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (%)	2	2	0.1633	0.0188								
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	3	3	0.1501	0.0224	0.1501	0.2075	0.0224	0.0162	14.93%	0.25	0.0216	5.32%
121.99	Acid Soluble Mg, Other (%)	3	3	0.1348	0.0140	0.1348	0.2067	0.0140	0.0101	10.41%	0.16	0.0044	5.41%
131.00	Water Soluble Mg, AA (%)	1		0.1200									
143.00	Elemental S, Gravimetric Sulfur - carbon disulfide soluble sulfur (%)	2	2	9.761	13.00								
143.99	Elemental S, Other (%)	5	5	19.19	1.224	19.19		1.224	0.6844	6.38%		0.5714	2.56%
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	9	9	19.40	0.5085	19.40		0.5766	0.2402	2.97%		0.2046	2.56%
148.00	Total S, Combustion (20%)	7	7	19.17	1.543	19.17	1.0000	1.746	0.8250	9.11%	4.07	0.3326	2.56%
148.01	Total S, Gravimetric - sulfate and elemental (20%)	12	11	19.73	0.7351	19.68	1.0000	0.7201	0.2714	3.66%	1.68	0.2296	2.55%
148.07	Total S, ICP, test portion as in 2017.02 (20%)	18	17	18.82	1.107	18.97	1.0000	0.7982	0.2420	4.21%	1.86	0.2874	2.57%
148.99	Total S, Other (20%)	11	11	19.16	0.6589	19.16	1.0000	0.7472	0.2816	3.90%	1.74	0.2755	2.56%
149.02	S - HNO3 soluble, Turbidimetric, modification of JAOAC 63.845 (%)	1		19.80									
149.04	S - HNO3 soluble, ICP (%)	3	3	19.23	0.7999	19.23		0.7999	0.5773	4.16%		0.2779	2.56%
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid (ppm)	1		0.3655									
151.30	Acid Soluble As, ICP (ppm)	7	4	0.6898	0.4775	0.6898		0.4775	0.2984	69.22%		0.0567	16.92%
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	4	2	0.9427	0.5157	0.9427		0.5157	0.4558	54.71%		0.1383	16.14%
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	2	1	4.343									
151.99	Acid Soluble As, Other (ppm)	3	2	0.5044	0.1972	0.5044		0.1972	0.1743	39.09%		0.0268	17.73%
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	1		0.0100									
165.99	Acid Soluble B, Other (%)	5	4	0.0026	0.0028	0.0026	0.0034	0.0028	0.0018	106.76%	1.93	0.0002	9.78%
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	2	1	0.1170									
181.30	Acid Soluble Cd, ICP (ppm)	7	5	0.1884	0.1002	0.1884		0.1002	0.0560	53.21%		0.0100	20.57%
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	1		0.9860									
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	3	1	0.1315		0.1884		0.1002	0.1253	53.21%		0.0110	20.57%
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	1		0.0500									

Method Code	Analyte & Method Sample # 190511	# 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
181.99	Acid Soluble Cd, Other (ppm)	4	3	0.0886	0.0175	0.0886		0.0175	0.0126	19.74%		0.0052	23.04%
191.00	Acid Soluble Cr, AA, test portion 2006.03 modified w/dual acid (ppm)	2	2	8.305	4.667								
191.30	Acid Soluble Cr, ICP (ppm)	11	9	9.974	1.433	10.14		1.212	0.5048	11.95%		0.8907	11.29%
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	1		9.432									
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	4	4	11.26	1.918	11.26		1.918	1.199	17.03%		0.4929	11.11%
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	2	2	8.577	0.1744								
191.99	Acid Soluble Cr, Other (ppm)	4	3	9.208	2.912	9.208		2.912	2.102	31.63%		0.2796	11.45%
202.00	Acid Soluble Co, AA, test portion 2006.03 modified w/dual acid (ppm)	1		18.29									
202.30	Acid Soluble Co, ICP (ppm)	9	6	3.686	0.7099	3.686	2.1058	0.8050	0.4108	21.84%	0.89	0.0380	13.15%
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	2	2	5.218	0.3924								
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	5	5	3.887	1.309	3.887	2.1662	1.309	0.7317	33.67%	1.41	0.1365	13.04%
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	1		4.748									
202.99	Acid Soluble Co, Other (ppm)	5	4	3.607	3.130	3.607	2.0821	3.130	1.956	86.76%	3.50	0.0784	13.19%
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	4	4	0.0064	0.0025	0.0064	0.0056	0.0025	0.0015	38.67%	1.02	0.0003	8.55%
221.01	Acid Soluble Cu, AA, organic 965.09 (%)	1		0.0060									
221.03	Acid Soluble Cu, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	2	2	0.0050	0.0007								
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	10	8	0.0072	0.0020	0.0072	0.0057	0.0023	0.0010	31.42%	0.92	0.0004	8.41%
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	3	3	0.0055	0.0006	0.0055	0.0055	0.0006	0.0004	10.58%	0.24	0.0003	8.76%
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	8	7	0.0053	0.0009	0.0053	0.0055	0.0010	0.0005	18.14%	0.41	0.0001	8.80%
221.99	Acid Soluble Cu, Other (%)	10	9	0.0051	0.0004	0.0051	0.0055	0.0004	0.0002	8.32%	0.18	0.0001	8.86%
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	2	2	1.123	0.0463								
241.03	Acid Soluble Fe, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	1		0.9820									
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	8	8	1.184	0.0741	1.184	0.1234	0.0841	0.0372	7.10%	1.59	0.0238	3.90%
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (%)	2	2	1.602	0.6892								
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	6	6	1.106	0.0446	1.106	0.1156	0.0506	0.0258	4.58%	1.02	0.0609	3.94%
241.99	Acid Soluble Fe, Other (%)	4	4	1.149	0.0803	1.149	0.1199	0.0803	0.0502	6.99%	1.56	0.0384	3.92%
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	2	1	1.138									
251.30	Acid Soluble Pb, ICP (ppm)	8	6	1.591	0.2842	1.591		0.3223	0.1645	20.25%		0.2594	14.92%
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	4	3	2.372	1.499	2.372		1.499	1.082	63.19%		0.1429	14.05%
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	1		0.8000									
251.99	Acid Soluble Pb, Other (ppm)	4	4	1.045	0.3740	1.045		0.3740	0.2338	35.80%		0.0263	15.89%
261.00	Acid Soluble Mn, AA, Mn2+ only (%)	1		0.0100									
261.12	Acid Soluble Mn, AA, inorganic 965.09 (%)	1		0.0035									
261.15	Acid Soluble Mn, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	1		0.0033									
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	3	2	0.0042	0.0002	0.0042	0.0054	0.0002	0.0002	4.18%	0.08	0.0001	9.11%
261.34	Acid Soluble Mn, ICP, test portion 2006.03A-C (%)	1		0.0040									
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	3	3	0.0036	0.0006	0.0036	0.0054	0.0006	0.0004	16.02%	0.25	0.0007	9.33%
261.99	Acid Soluble Mn, Other (%)	3	3	0.0034	0.0008	0.0034	0.0053	0.0008	0.0005	22.02%	0.33	0.0002	9.40%
281.00	Acid Soluble Hg, AA (ppm)	1		0.0107									
281.30	Acid Soluble Hg, ICP (ppm)	2	1	0.1000									
281.99	Acid Soluble Hg, Other (ppm)	5	4	0.0844	0.0364	0.0844		0.0364	0.0227	43.12%		0.0066	23.21%
289.00	Acid Soluble Mo, AA, test portion 2006.03 modified w/dual acid (ppm)	1		1.755									
289.30	Acid Soluble Mo, ICP (ppm)	7	6	2.451	1.664	2.451	1.7353	1.886	0.9627	76.96%	2.53	0.1704	13.98%
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	5	4	1.657	1.116	1.657	1.4971	1.116	0.6974	67.35%	1.74	0.1122	14.83%

Method Code	Analyte & Method Sample # 190511	# 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
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	1		6.636									
289.99	Acid Soluble Mo, Other (ppm)	3	2	5.003	4.380	5.003	2.5009	4.380	3.871	87.54%	4.08	0.3502	12.55%
291.00	Acid Soluble Ni, AA, test portion 2006.03 modified w/dual acid (ppm)	1		4.687									
291.30	Acid Soluble Ni, ICP (ppm)	11	9	7.658	2.946	6.906		0.7956	0.3315	11.52%		0.6096	11.96%
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	5	5	6.820	1.775	6.820		1.775	0.9923	26.03%		0.5842	11.98%
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	2	2	5.321	1.445								
291.99	Acid Soluble Ni, Other (ppm)	6	6	5.780	1.021	5.780		1.158	0.5910	20.04%		0.3551	12.28%
301.00	Acid Soluble Se, AA, test portion 2006.03 modified w/dual acid (ppm)	2	0	0.0800									
301.30	Acid Soluble Se, ICP (ppm)	5	3	0.9224	0.5191	0.9224		0.5191	0.3746	56.28%		0.4048	16.19%
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	2	1	0.8985									
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	1		1.100									
301.99	Acid Soluble Se, Other (ppm)	5	5	0.5528	0.3082	0.5528		0.3082	0.1723	55.76%		0.1269	17.49%
311.33	Sodium, ICP, test portion as in 2017.02 (%)	3	3	0.0731	0.0053	0.0731	0.0123	0.0053	0.0038	7.24%	1.00	0.0039	5.93%
311.99	Sodium, Other (%)	3	3	0.0817	0.0116	0.0817	0.0132	0.0115	0.0083	14.14%	2.04	0.0100	5.83%
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	4	4	0.0112	0.0008	0.0112	0.0061	0.0008	0.0005	7.31%	0.31	0.0006	7.87%
321.01	Acid Soluble Zn, AA, organic 965.09 (%)	1		0.0100									
321.03	Acid Soluble Zn, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	2	2	0.0102	0.0002								
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	11	10	0.0111	0.0013	0.0110	0.0061	0.0012	0.0005	10.61%	0.45	0.0009	7.89%
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	3	3	0.0108	0.0034	0.0108	0.0061	0.0034	0.0025	31.83%	1.32	0.0017	7.90%
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	8	8	28.49	52.73	28.49	1.0000	59.80	26.43	209.90%	139.32	0.4523	2.42%
321.99	Acid Soluble Zn, Other (%)	12	10	0.0130	0.0064	0.0112	0.0061	0.0021	0.0008	18.39%	0.78	0.0003	7.86%
325.30	Water Soluble Zn, ICP (%)	1		0.0129									

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 # 190511

Method Precision Report

Grade 16-1-0

Issue Date : 06/30/2019

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility sR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
001.10	Ammoniacal N, Magnesium Oxide Method (%)	10	9	15.62	0.3663	0.3362	0.2055	0.3941	2.15%	1.32%	2.52%	1.918
001.99	Ammoniacal N, Other (%)	25	24	15.94	0.7349	0.7302	0.1175	0.7396	4.58%	0.74%	4.64%	6.296
010.60	Total N, Combustion (16%)	60	55	17.49	0.2041	0.1928	0.0947	0.2148	1.10%	0.54%	1.23%	2.269
010.99	Total N, Other (16%)	16	15	16.94	0.6838	0.6797	0.1069	0.6880	4.01%	0.63%	4.06%	6.436
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	18	15	1.315	0.1934	0.1931	0.0150	0.1937	14.69%	1.14%	14.73%	12.89
020.50	Total P2O5, ICP (%)	24	22	1.326	0.0757	0.0723	0.0321	0.0791	5.45%	2.42%	5.96%	2.465
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	9	9	1.267	0.0770	0.0710	0.0421	0.0826	5.61%	3.32%	6.52%	1.961
041.99	Direct Available P2O5, Other (1%)	11	10	1.116	0.1491	0.1444	0.0527	0.1537	12.94%	4.72%	13.78%	2.918
050.99	Soluble K2O, Other (%)	11	8	0.4292	0.0141	0.0115	0.0116	0.0163	2.67%	2.71%	3.80%	1.405
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	9	8	19.30	0.4498	0.4350	0.1618	0.4641	2.25%	0.84%	2.40%	2.868
148.01	Total S, Gravimetric - sulfate and elemental (20%)	12	11	19.73	0.7351	0.7202	0.2088	0.7498	3.65%	1.06%	3.80%	3.591
148.07	Total S, ICP, test portion as in 2017.02 (20%)	18	15	19.03	0.6763	0.6592	0.2135	0.6929	3.46%	1.12%	3.64%	3.245
148.99	Total S, Other (20%)	11	10	19.25	0.6084	0.5880	0.2207	0.6281	3.05%	1.15%	3.26%	2.846
191.30	Acid Soluble Cr, ICP (ppm)	11	8	10.37	0.8796	0.5568	0.9630	1.112	5.37%	9.29%	10.73%	1.155
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	10	8	0.0072	0.0020	0.0020	0.0004	0.0020	27.44%	5.48%	27.98%	5.108
221.99	Acid Soluble Cu, Other (%)	10	9	0.0051	0.0004	0.0004	0.0001	0.0004	8.65%	1.53%	8.78%	5.724
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	8	8	1.184	0.0741	0.0723	0.0230	0.0759	6.11%	1.95%	6.41%	3.293
291.30	Acid Soluble Ni, ICP (ppm)	11	8	6.701	0.7042	0.5140	0.6808	0.8530	7.67%	10.16%	12.73%	1.253
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	11	9	0.0108	0.0009	0.0007	0.0008	0.0010	6.35%	7.11%	9.54%	1.341
321.99	Acid Soluble Zn, Other (%)	12	8	0.0111	0.0022	0.0022	0.0001	0.0022	19.68%	0.87%	19.70%	22.55

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 # 190511

Grade 16-1-0

Lab Values

Methods: 143

Labs Reporting: 98

Issue Date : 06/30/2019

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0498	15.00	0.4000	15.61	0.3874	0.3096	10	-1.47	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0309	15.18	0.0100	15.61	0.3874	0.3096	10	-1.05	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0456	15.43	0.0500	15.61	0.3874	0.3096	10	-0.45	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0117	15.50	1.000	15.61	0.3874	0.3096	10	-0.27	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0444	15.62	0.3000	15.61	0.3874	0.3096	10	0.02	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0481	15.69	0.5000	15.61	0.3874	0.3096	10	0.19	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0451	15.78	0.2700	15.61	0.3874	0.3096	10	0.39	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0231	15.80	0.4000	15.61	0.3874	0.3096	10	0.45	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0526	15.94	0.1562	15.61	0.3874	0.3096	10	0.80	NA	0
001.10	Ammoniacal N, Magnesium Oxide Method (%)	0136	16.16	0.0100	15.61	0.3874	0.3096	10	1.30	NA	0
001.99	Ammoniacal N, Other (%)	0560	14.47	0.1900	15.96	0.7528	0.1320	24	-1.99	NA	0
001.99	Ammoniacal N, Other (%)	0559	14.61	0.3900	15.96	0.7528	0.1320	24	-1.80	NA	0
001.99	Ammoniacal N, Other (%)	0520	14.67	0.2400	15.96	0.7528	0.1320	24	-1.71	NA	0
001.99	Ammoniacal N, Other (%)	0536	15.04	0.0300	15.96	0.7528	0.1320	24	-1.23	NA	0
001.99	Ammoniacal N, Other (%)	0538	15.08	0.0500	15.96	0.7528	0.1320	24	-1.18	NA	0
001.99	Ammoniacal N, Other (%)	0537	15.09	0.2100	15.96	0.7528	0.1320	24	-1.16	NA	0
001.99	Ammoniacal N, Other (%)	0027	15.84	0.0970	15.96	0.7528	0.1320	24	-0.16	NA	0
001.99	Ammoniacal N, Other (%)	0556	15.88	0.1500	15.96	0.7528	0.1320	24	-0.11	NA	0
001.99	Ammoniacal N, Other (%)	0546	15.91	0.0040	15.96	0.7528	0.1320	24	-0.07	NA	0
001.99	Ammoniacal N, Other (%)	0476	16.09	0.1600	15.96	0.7528	0.1320	24	0.17	NA	0
001.99	Ammoniacal N, Other (%)	0532	16.15	0.1100	15.96	0.7528	0.1320	24	0.25	NA	0
001.99	Ammoniacal N, Other (%)	0522	16.19	0.0300	15.96	0.7528	0.1320	24	0.30	NA	0
001.99	Ammoniacal N, Other (%)	0527	16.20	0.2000	15.96	0.7528	0.1320	24	0.32	NA	0
001.99	Ammoniacal N, Other (%)	0544	16.21	0.0600	15.96	0.7528	0.1320	24	0.33	NA	0
001.99	Ammoniacal N, Other (%)	0405	16.28	0.0700	15.96	0.7528	0.1320	24	0.42	NA	0
001.99	Ammoniacal N, Other (%)	0420	16.28	0.2100	15.96	0.7528	0.1320	24	0.42	NA	0
001.99	Ammoniacal N, Other (%)	0255	16.28	0.3400	15.96	0.7528	0.1320	24	0.42	NA	0
001.99	Ammoniacal N, Other (%)	0096	16.33	0.0400	15.96	0.7528	0.1320	24	0.49	NA	0
001.99	Ammoniacal N, Other (%)	0423	16.38	0.2500	15.96	0.7528	0.1320	24	0.55	NA	0
001.99	Ammoniacal N, Other (%)	0510	16.38	0.0468	15.96	0.7528	0.1320	24	0.55	NA	0
001.99	Ammoniacal N, Other (%)	0545	16.38	0.0400	15.96	0.7528	0.1320	24	0.56	NA	0
001.99	Ammoniacal N, Other (%)	0549	16.50	0.1000	15.96	0.7528	0.1320	24	0.72	NA	0
001.99	Ammoniacal N, Other (%)	0524	17.02	0.0495	15.96	0.7528	0.1320	24	1.41	NA	0
001.99	Ammoniacal N, Other (%)	0506	17.25	0.1000	15.96	0.7528	0.1320	24	1.71	NA	0
001.99	Ammoniacal N, Other (%)	0550	17.09	0.6100	15.96	0.7528	0.1320	24	1.49	NA	1
003.10	Water Insoluble N, Method I (%)	0309	0.6400	0.0600	1.034	0.3028	0.2263	4	-1.30		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				
003.10	Water Insoluble N, Method I (%)	0526	0.9562	0.5650	1.034	0.3028	0.2263	4	-0.26		0
003.10	Water Insoluble N, Method I (%)	0136	1.235	0.0300	1.034	0.3028	0.2263	4	0.66		0
003.10	Water Insoluble N, Method I (%)	0451	1.305	0.2500	1.034	0.3028	0.2263	4	0.89		0
003.99	Water Insoluble N, Other (%)	0506	0.7045	0.0450	0.9561	0.1843	0.1363	4	-1.37		0
003.99	Water Insoluble N, Other (%)	0520	0.9400	0.4000	0.9561	0.1843	0.1363	4	-0.09		0
003.99	Water Insoluble N, Other (%)	0532	1.055	0.0500	0.9561	0.1843	0.1363	4	0.54		0
003.99	Water Insoluble N, Other (%)	0476	1.125	0.0500	0.9561	0.1843	0.1363	4	0.92		0
009.99	Ammoniacal Plus Nitrate N, Other (%)	0518	14.95	0.3000				1			0
010.11	Total N, Modified Comprehensive (16%)	0533	15.64	0.0700	16.47	0.5979	0.0618	7	-1.26	Low	0
010.11	Total N, Modified Comprehensive (16%)	0309	15.95	0.0800	16.47	0.5979	0.0618	7	-0.78	OK	0
010.11	Total N, Modified Comprehensive (16%)	0456	16.43	0.0500	16.47	0.5979	0.0618	7	-0.06	OK	0
010.11	Total N, Modified Comprehensive (16%)	0510	16.51	0.0027	16.47	0.5979	0.0618	7	0.07	OK	0
010.11	Total N, Modified Comprehensive (16%)	0546	16.66	0.0500	16.47	0.5979	0.0618	7	0.29	OK	0
010.11	Total N, Modified Comprehensive (16%)	0544	16.96	0.0600	16.47	0.5979	0.0618	7	0.75	OK	0
010.11	Total N, Modified Comprehensive (16%)	0105	17.12	0.1200	16.47	0.5979	0.0618	7	0.99	OK	0
010.12	Total N, Salicylic (16%)	0498	15.00	0.4000	16.41	1.244	0.3400	3	-1.14		0
010.12	Total N, Salicylic (16%)	0117	16.90	0.6000	16.41	1.244	0.3400	3	0.39		0
010.12	Total N, Salicylic (16%)	0416	17.34	0.0200	16.41	1.244	0.3400	3	0.75		0
010.16	Total N, Raney (16%)	0300	17.15	0.5000				1			0
010.17	Total N, Comprehensive (16%)	0526	15.66	3.237				1			0
010.60	Total N, Combustion (16%)	0368	16.64	0.1470	17.50	0.1984	0.1090	59	-4.31	Low	0
010.60	Total N, Combustion (16%)	0493	16.92	0.1000	17.50	0.1984	0.1090	59	-2.92	OK	0
010.60	Total N, Combustion (16%)	0234	17.00	0.0000	17.50	0.1984	0.1090	59	-2.52	OK	0
010.60	Total N, Combustion (16%)	0555	17.18	0.3700	17.50	0.1984	0.1090	59	-1.63	OK	0
010.60	Total N, Combustion (16%)	0472	17.22	0.0400	17.50	0.1984	0.1090	59	-1.41	OK	0
010.60	Total N, Combustion (16%)	0521	17.24	0.0000	17.50	0.1984	0.1090	59	-1.29	OK	0
010.60	Total N, Combustion (16%)	0018	17.25	0.1000	17.50	0.1984	0.1090	59	-1.26	OK	0
010.60	Total N, Combustion (16%)	0405	17.28	0.0300	17.50	0.1984	0.1090	59	-1.13	OK	0
010.60	Total N, Combustion (16%)	0292	17.29	0.0100	17.50	0.1984	0.1090	59	-1.08	OK	0
010.60	Total N, Combustion (16%)	0525	17.31	0.3100	17.50	0.1984	0.1090	59	-0.98	OK	0
010.60	Total N, Combustion (16%)	0527	17.33	0.0140	17.50	0.1984	0.1090	59	-0.84	OK	0
010.60	Total N, Combustion (16%)	0231	17.36	0.0200	17.50	0.1984	0.1090	59	-0.70	OK	0
010.60	Total N, Combustion (16%)	0452	17.38	0.0700	17.50	0.1984	0.1090	59	-0.63	OK	0
010.60	Total N, Combustion (16%)	0037	17.39	0.0460	17.50	0.1984	0.1090	59	-0.56	OK	0
010.60	Total N, Combustion (16%)	0501	17.40	0.2170	17.50	0.1984	0.1090	59	-0.51	OK	0
010.60	Total N, Combustion (16%)	0324	17.40	0.2000	17.50	0.1984	0.1090	59	-0.50	OK	0
010.60	Total N, Combustion (16%)	0482	17.40	0.0000	17.50	0.1984	0.1090	59	-0.50	OK	0
010.60	Total N, Combustion (16%)	0169	17.40	0.0780	17.50	0.1984	0.1090	59	-0.48	OK	0
010.60	Total N, Combustion (16%)	0486	17.41	0.0500	17.50	0.1984	0.1090	59	-0.47	OK	0
010.60	Total N, Combustion (16%)	0086	17.41	0.0160	17.50	0.1984	0.1090	59	-0.45	OK	0
010.60	Total N, Combustion (16%)	0114	17.42	0.0300	17.50	0.1984	0.1090	59	-0.42	OK	0
010.60	Total N, Combustion (16%)	0389	17.43	0.0500	17.50	0.1984	0.1090	59	-0.37	OK	0
010.60	Total N, Combustion (16%)	0423	17.44	0.2000	17.50	0.1984	0.1090	59	-0.30	OK	0
010.60	Total N, Combustion (16%)	0106	17.45	0.0500	17.50	0.1984	0.1090	59	-0.27	OK	0
010.60	Total N, Combustion (16%)	0325	17.45	0.5000	17.50	0.1984	0.1090	59	-0.25	OK	0
010.60	Total N, Combustion (16%)	0049	17.45	0.1200	17.50	0.1984	0.1090	59	-0.25	OK	0
010.60	Total N, Combustion (16%)	0444	17.47	0.2800	17.50	0.1984	0.1090	59	-0.15	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 (16%)	0561	17.48	0.0300	17.50	0.1984	0.1090	59	-0.12	OK	0
010.60	Total N, Combustion (16%)	0035	17.49	0.0500	17.50	0.1984	0.1090	59	-0.07	OK	0
010.60	Total N, Combustion (16%)	0136	17.49	0.0800	17.50	0.1984	0.1090	59	-0.05	OK	0
010.60	Total N, Combustion (16%)	0096	17.50	0.0500	17.50	0.1984	0.1090	59	-0.02	OK	0
010.60	Total N, Combustion (16%)	0422	17.51	0.0200	17.50	0.1984	0.1090	59	0.05	OK	0
010.60	Total N, Combustion (16%)	0483	17.51	0.0400	17.50	0.1984	0.1090	59	0.05	OK	0
010.60	Total N, Combustion (16%)	0131	17.52	0.0250	17.50	0.1984	0.1090	59	0.09	OK	0
010.60	Total N, Combustion (16%)	0177	17.54	0.0300	17.50	0.1984	0.1090	59	0.18	OK	0
010.60	Total N, Combustion (16%)	0451	17.54	0.2600	17.50	0.1984	0.1090	59	0.21	OK	0
010.60	Total N, Combustion (16%)	0040	17.55	0.1000	17.50	0.1984	0.1090	59	0.26	OK	0
010.60	Total N, Combustion (16%)	0523	17.55	0.1000	17.50	0.1984	0.1090	59	0.26	OK	0
010.60	Total N, Combustion (16%)	0055	17.56	0.0800	17.50	0.1984	0.1090	59	0.31	OK	0
010.60	Total N, Combustion (16%)	0105	17.56	0.1100	17.50	0.1984	0.1090	59	0.32	OK	0
010.60	Total N, Combustion (16%)	0377	17.57	0.0300	17.50	0.1984	0.1090	59	0.33	OK	0
010.60	Total N, Combustion (16%)	0043	17.58	0.0700	17.50	0.1984	0.1090	59	0.38	OK	0
010.60	Total N, Combustion (16%)	0360	17.58	0.0700	17.50	0.1984	0.1090	59	0.38	OK	0
010.60	Total N, Combustion (16%)	0095	17.59	0.0800	17.50	0.1984	0.1090	59	0.46	OK	0
010.60	Total N, Combustion (16%)	0307	17.59	0.0800	17.50	0.1984	0.1090	59	0.46	OK	0
010.60	Total N, Combustion (16%)	0421	17.67	0.1300	17.50	0.1984	0.1090	59	0.84	OK	0
010.60	Total N, Combustion (16%)	0025	17.69	0.0200	17.50	0.1984	0.1090	59	0.96	OK	0
010.60	Total N, Combustion (16%)	0042	17.70	0.4000	17.50	0.1984	0.1090	59	1.01	OK	0
010.60	Total N, Combustion (16%)	0117	17.70	0.0000	17.50	0.1984	0.1090	59	1.01	OK	0
010.60	Total N, Combustion (16%)	0354	17.70	0.0000	17.50	0.1984	0.1090	59	1.01	OK	0
010.60	Total N, Combustion (16%)	0485	17.70	0.2390	17.50	0.1984	0.1090	59	1.01	OK	0
010.60	Total N, Combustion (16%)	0542	17.74	0.0400	17.50	0.1984	0.1090	59	1.21	OK	0
010.60	Total N, Combustion (16%)	0029	17.76	0.0500	17.50	0.1984	0.1090	59	1.29	OK	0
010.60	Total N, Combustion (16%)	0402	17.79	0.3000	17.50	0.1984	0.1090	59	1.47	OK	0
010.60	Total N, Combustion (16%)	0550	17.88	0.0400	17.50	0.1984	0.1090	59	1.92	OK	0
010.60	Total N, Combustion (16%)	0420	17.94	0.1100	17.50	0.1984	0.1090	59	2.20	OK	0
010.60	Total N, Combustion (16%)	0547	17.98	0.5600	17.50	0.1984	0.1090	59	2.42	OK	0
010.60	Total N, Combustion (16%)	0230	18.00	0.0000	17.50	0.1984	0.1090	59	2.52	OK	0
010.60	Total N, Combustion (16%)	0023	18.19	0.1900	17.50	0.1984	0.1090	59	3.46	OK	0
010.60	Total N, Combustion (16%)	0255	18.19	0.8280	17.50	0.1984	0.1090	59	3.50	High	1
010.99	Total N, Other (16%)	0520	15.61	0.1600	16.89	0.7912	0.1580	16	-1.61	Low	0
010.99	Total N, Other (16%)	0553	15.93	0.5500	16.89	0.7912	0.1580	16	-1.21	Low	0
010.99	Total N, Other (16%)	0538	16.11	0.0800	16.89	0.7912	0.1580	16	-0.98	Low	0
010.99	Total N, Other (16%)	0532	16.20	0.1600	16.89	0.7912	0.1580	16	-0.87	Low	0
010.99	Total N, Other (16%)	0537	16.21	0.2600	16.89	0.7912	0.1580	16	-0.85	OK	0
010.99	Total N, Other (16%)	0534	16.55	0.1000	16.89	0.7912	0.1580	16	-0.42	OK	0
010.99	Total N, Other (16%)	0559	16.72	0.2200	16.89	0.7912	0.1580	16	-0.21	OK	0
010.99	Total N, Other (16%)	0420	17.11	0.1800	16.89	0.7912	0.1580	16	0.28	OK	0
010.99	Total N, Other (16%)	0493	17.15	0.1000	16.89	0.7912	0.1580	16	0.33	OK	0
010.99	Total N, Other (16%)	0481	17.21	0.2200	16.89	0.7912	0.1580	16	0.41	OK	0
010.99	Total N, Other (16%)	0476	17.22	0.2200	16.89	0.7912	0.1580	16	0.42	OK	0
010.99	Total N, Other (16%)	0027	17.36	0.0280	16.89	0.7912	0.1580	16	0.60	OK	0
010.99	Total N, Other (16%)	0513	17.38	0.0800	16.89	0.7912	0.1580	16	0.62	OK	0
010.99	Total N, Other (16%)	0371	17.50	0.0200	16.89	0.7912	0.1580	16	0.78	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				
010.99	Total N, Other (16%)	0524	17.88	0.0497	16.89	0.7912	0.1580	16	1.25	High	0
010.99	Total N, Other (16%)	0506	17.95	0.1000	16.89	0.7912	0.1580	16	1.34	High	0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0049	1.155	0.0300				2			0
020.10	Total P2O5, Gravimetric Quinolinium MolybdoP (%)	0493	1.200	0.1000				2			0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0292	0.9550	0.0100	1.339	0.2011	0.0219	16	-1.91	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0506	0.9670	0.0400	1.339	0.2011	0.0219	16	-1.85	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0553	1.220	0.0000	1.339	0.2011	0.0219	16	-0.59	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0027	1.230	0.0400	1.339	0.2011	0.0219	16	-0.54	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0476	1.250	0.0000	1.339	0.2011	0.0219	16	-0.44	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0481	1.255	0.0100	1.339	0.2011	0.0219	16	-0.42	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0526	1.263	0.0000	1.339	0.2011	0.0219	16	-0.38	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0177	1.278	0.0065	1.339	0.2011	0.0219	16	-0.30	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0416	1.290	0.0000	1.339	0.2011	0.0219	16	-0.24	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0510	1.352	0.0337	1.339	0.2011	0.0219	16	0.07	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0522	1.490	0.0200	1.339	0.2011	0.0219	16	0.75	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0405	1.505	0.0300	1.339	0.2011	0.0219	16	0.83	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0371	1.510	0.0000	1.339	0.2011	0.0219	16	0.85	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0324	1.545	0.1300	1.339	0.2011	0.0219	16	1.03	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0534	1.570	0.0000	1.339	0.2011	0.0219	16	1.15	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0309	1.585	0.0300	1.339	0.2011	0.0219	16	1.23	NA	0
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0550	1.435	0.2500	1.339	0.2011	0.0219	16	0.48	NA	1
020.20	Total P2O5, Spectrophotometric MolybdovanadoP (%)	0420	< 1		1.339	0.2011	0.0219	16			5
020.40	Total P2O5, Automated (%)	0456	0.9600	0.0400	1.183	0.2303	0.0400	3	-0.97		0
020.40	Total P2O5, Automated (%)	0035	1.170	0.0800	1.183	0.2303	0.0400	3	-0.06		0
020.40	Total P2O5, Automated (%)	0096	1.420	0.0000	1.183	0.2303	0.0400	3	1.03		0
020.50	Total P2O5, ICP (%)	0234	1.000	0.0000	1.320	0.0904	0.0313	23	-3.54	NA	0
020.50	Total P2O5, ICP (%)	0422	1.185	0.0300	1.320	0.0904	0.0313	23	-1.50	NA	0
020.50	Total P2O5, ICP (%)	0521	1.190	0.0000	1.320	0.0904	0.0313	23	-1.44	NA	0
020.50	Total P2O5, ICP (%)	0472	1.205	0.0100	1.320	0.0904	0.0313	23	-1.27	NA	0
020.50	Total P2O5, ICP (%)	0501	1.225	0.0900	1.320	0.0904	0.0313	23	-1.05	NA	0
020.50	Total P2O5, ICP (%)	0255	1.246	0.0000	1.320	0.0904	0.0313	23	-0.82	NA	0
020.50	Total P2O5, ICP (%)	0389	1.265	0.0100	1.320	0.0904	0.0313	23	-0.61	NA	0
020.50	Total P2O5, ICP (%)	0231	1.310	0.0200	1.320	0.0904	0.0313	23	-0.11	NA	0
020.50	Total P2O5, ICP (%)	0524	1.323	0.0818	1.320	0.0904	0.0313	23	0.03	NA	0
020.50	Total P2O5, ICP (%)	0451	1.325	0.0700	1.320	0.0904	0.0313	23	0.05	NA	0
020.50	Total P2O5, ICP (%)	0368	1.325	0.0404	1.320	0.0904	0.0313	23	0.06	NA	0
020.50	Total P2O5, ICP (%)	0546	1.336	0.0040	1.320	0.0904	0.0313	23	0.18	NA	0
020.50	Total P2O5, ICP (%)	0444	1.345	0.0100	1.320	0.0904	0.0313	23	0.28	NA	0
020.50	Total P2O5, ICP (%)	0433	1.360	0.0000	1.320	0.0904	0.0313	23	0.44	NA	0
020.50	Total P2O5, ICP (%)	0547	1.360	0.0200	1.320	0.0904	0.0313	23	0.44	NA	0
020.50	Total P2O5, ICP (%)	0423	1.365	0.0300	1.320	0.0904	0.0313	23	0.50	NA	0
020.50	Total P2O5, ICP (%)	0402	1.375	0.0300	1.320	0.0904	0.0313	23	0.61	NA	0
020.50	Total P2O5, ICP (%)	0482	1.375	0.0900	1.320	0.0904	0.0313	23	0.61	NA	0
020.50	Total P2O5, ICP (%)	0523	1.400	0.0000	1.320	0.0904	0.0313	23	0.88	NA	0
020.50	Total P2O5, ICP (%)	0527	1.408	0.0067	1.320	0.0904	0.0313	23	0.98	NA	0
020.50	Total P2O5, ICP (%)	0525	1.409	0.0260	1.320	0.0904	0.0313	23	0.98	NA	0
020.50	Total P2O5, ICP (%)	0542	1.415	0.0700	1.320	0.0904	0.0313	23	1.05	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 (%)	0483	1.430	0.0800	1.320	0.0904	0.0313	23	1.22	NA	0
020.50	Total P2O5, ICP (%)	0555	0.9510	0.2928	1.320	0.0904	0.0313	23	-4.09	NA	1
020.99	Total P2O5, Other (%)	0513	1.245	0.0100	1.271	0.0222	0.0242	3	-1.15		0
020.99	Total P2O5, Other (%)	0515	1.282	0.0327	1.271	0.0222	0.0242	3	0.50		0
020.99	Total P2O5, Other (%)	0559	1.285	0.0300	1.271	0.0222	0.0242	3	0.65		0
030.20	Citrate Insoluble P2O5, Spectrophotometric MolybdovanadoP (%)	0405	0.1000	0.0000				1			0
030.40	Citrate Insoluble P2O5, Automated, test portion 963.03 A-B (%)	0096	1.385	0.0700				1			0
040.20	Indirect Available P2O5, Spectrophotometric (1%)	0561	1.225	0.0100				2			0
040.20	Indirect Available P2O5, Spectrophotometric (1%)	0405	1.410	0.0200				2			0
040.40	Indirect Available P2O5, Automated (1%)	0096	0.0350	0.0700				0			4
041.10	Direct Available P2O5, Gravimetric Quinolinium (1%)	0041	1.150	0.2800	1.181	0.0510	0.1300	3	-0.61		0
041.10	Direct Available P2O5, Gravimetric Quinolinium (1%)	0086	1.153	0.0101	1.181	0.0510	0.1300	3	-0.54		0
041.10	Direct Available P2O5, Gravimetric Quinolinium (1%)	0055	1.240	0.1000	1.181	0.0510	0.1300	3	1.15		0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (1%)	0513	1.180	0.0400				2			0
041.11	Direct Available P2O5, Gravimetric Quinolinium, Citrate-EDTA Ext. (1%)	0485	1.217	0.0044				2			0
041.20	Direct Available P2O5, Spectrophotometric (1%)	0498	0.5150	0.0100				2			0
041.20	Direct Available P2O5, Spectrophotometric (1%)	0027	1.130	0.0200				2			0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (1%)	0544	1.245	0.0100	1.382	0.2324	0.0189	3	-0.59		0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (1%)	0106	1.250	0.0400	1.382	0.2324	0.0189	3	-0.57		0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (1%)	0522	1.650	0.0067	1.382	0.2324	0.0189	3	1.15		0
041.40	Direct Available P2O5, Automated (1%)	0095	1.265	0.0900				2			0
041.40	Direct Available P2O5, Automated (1%)	0018	1.295	0.0300				2			0
041.50	Direct Available P2O5, ICP (1%)	0368	1.155	0.0091	1.280	0.1472	0.0342	5	-0.85		0
041.50	Direct Available P2O5, ICP (1%)	0231	1.195	0.1300	1.280	0.1472	0.0342	5	-0.57		0
041.50	Direct Available P2O5, ICP (1%)	0325	1.200	0.0000	1.280	0.1472	0.0342	5	-0.54		0
041.50	Direct Available P2O5, ICP (1%)	0452	1.335	0.0300	1.280	0.1472	0.0342	5	0.38		0
041.50	Direct Available P2O5, ICP (1%)	0131	1.513	0.0020	1.280	0.1472	0.0342	5	1.59		0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	0040	1.150	0.1000	1.267	0.0873	0.0484	9	-1.23	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	0423	1.175	0.0300	1.267	0.0873	0.0484	9	-0.97	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	0043	1.220	0.1000	1.267	0.0873	0.0484	9	-0.49	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	0377	1.225	0.0300	1.267	0.0873	0.0484	9	-0.44	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	0117	1.290	0.0040	1.267	0.0873	0.0484	9	0.25	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	0233	1.299	0.0520	1.267	0.0873	0.0484	9	0.34	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	0360	1.325	0.0300	1.267	0.0873	0.0484	9	0.62	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	0421	1.355	0.0100	1.267	0.0873	0.0484	9	0.93	OK	0
041.51	Direct Available P2O5, ICP, Citrate-EDTA Ext. (1%)	0023	1.360	0.0800	1.267	0.0873	0.0484	9	0.99	OK	0
041.60	Direct Available P2O5, Citrate-EDTA Ext. (1%)	0230	0.2700	0.0200	1.203	0.1977	0.0274	7	-4.27	Low	0
041.60	Direct Available P2O5, Citrate-EDTA Ext. (1%)	0472	1.045	0.0300	1.203	0.1977	0.0274	7	-0.72	OK	0
041.60	Direct Available P2O5, Citrate-EDTA Ext. (1%)	0354	1.210	0.0200	1.203	0.1977	0.0274	7	0.03	OK	0
041.60	Direct Available P2O5, Citrate-EDTA Ext. (1%)	0072	1.245	0.0520	1.203	0.1977	0.0274	7	0.19	OK	0
041.60	Direct Available P2O5, Citrate-EDTA Ext. (1%)	0486	1.285	0.0300	1.203	0.1977	0.0274	7	0.37	OK	0
041.60	Direct Available P2O5, Citrate-EDTA Ext. (1%)	0029	1.300	0.0400	1.203	0.1977	0.0274	7	0.44	OK	0
041.60	Direct Available P2O5, Citrate-EDTA Ext. (1%)	0055	1.430	0.0000	1.203	0.1977	0.0274	7	1.04	OK	0
041.60	Direct Available P2O5, Citrate-EDTA Ext. (1%)	0037	1.088	0.1880	1.203	0.1977	0.0274	7	-0.53	OK	1
041.99	Direct Available P2O5, Other (1%)	0518	0.8150	0.1300	1.149	0.1741	0.0611	11	-1.80	OK	0
041.99	Direct Available P2O5, Other (1%)	0537	1.014	0.0320	1.149	0.1741	0.0611	11	-0.73	OK	0
041.99	Direct Available P2O5, Other (1%)	0533	1.020	0.0800	1.149	0.1741	0.0611	11	-0.70	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				
041.99	Direct Available P2O5, Other (1%)	0538	1.060	0.0400	1.149	0.1741	0.0611	11	-0.48	OK	0
041.99	Direct Available P2O5, Other (1%)	0532	1.110	0.0400	1.149	0.1741	0.0611	11	-0.21	OK	0
041.99	Direct Available P2O5, Other (1%)	0549	1.150	0.1000	1.149	0.1741	0.0611	11	0.00	OK	0
041.99	Direct Available P2O5, Other (1%)	0560	1.150	0.1200	1.149	0.1741	0.0611	11	0.00	OK	0
041.99	Direct Available P2O5, Other (1%)	0520	1.250	0.0200	1.149	0.1741	0.0611	11	0.54	OK	0
041.99	Direct Available P2O5, Other (1%)	0405	1.260	0.0400	1.149	0.1741	0.0611	11	0.59	OK	0
041.99	Direct Available P2O5, Other (1%)	0536	1.330	0.0400	1.149	0.1741	0.0611	11	0.97	OK	0
041.99	Direct Available P2O5, Other (1%)	0545	2.415	0.0300	1.149	0.1741	0.0611	11	6.80	High	0
042.10	Water Soluble OrthoP As P2O5, Spectrophotometric (%)	0553	0.0150	0.0100				1			0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0420	< 1					0			5
048.40	Water Soluble P2O5, Automated (%)	0096	0.0800	0.0200				1			0
048.99	Water Soluble P2O5, Other (%)	0556	1.350	0.0600				1			0
050.00	Soluble K2O, STPB Oxalate (%)	0055	0.0550	0.0100				1			0
050.30	Soluble K2O, AA (Oxalate) (%)	0136	0.4050	0.0100				1			0
050.31	Soluble K2O, AA (Citrate) (%)	0472	0.1750	0.0300				1			0
050.50	Soluble K2O, ICP (Oxalate) (%)	0420	0.3669	0.0020				2			0
050.50	Soluble K2O, ICP (Oxalate) (%)	0055	0.3800	0.0000				2			0
050.51	Soluble K2O, ICP (Citrate) (%)	0452	0.3550	0.0100	0.4829	0.1975	0.0813	4	-0.65		0
050.51	Soluble K2O, ICP (Citrate) (%)	0547	0.3700	0.0000	0.4829	0.1975	0.0813	4	-0.57		0
050.51	Soluble K2O, ICP (Citrate) (%)	0368	0.4315	0.0052	0.4829	0.1975	0.0813	4	-0.26		0
050.51	Soluble K2O, ICP (Citrate) (%)	0483	0.7750	0.3100	0.4829	0.1975	0.0813	4	1.48		0
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	0354	0.4090	0.0420	0.4155	0.0104	0.0150	3	-0.62		0
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	0360	0.4100	0.0000	0.4155	0.0104	0.0150	3	-0.53		0
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	0423	0.4275	0.0030	0.4155	0.0104	0.0150	3	1.15		0
050.61	Soluble K2O, Flame Photometric (Citrate) (%)	0456	0.0900	0.0200				1			0
050.99	Soluble K2O, Other (%)	0096	0.4100	0.0000	0.4328	0.0194	0.0194	9	-1.09	OK	0
050.99	Soluble K2O, Other (%)	0546	0.4150	0.0220	0.4328	0.0194	0.0194	9	-0.85	OK	0
050.99	Soluble K2O, Other (%)	0524	0.4234	0.0004	0.4328	0.0194	0.0194	9	-0.45	OK	0
050.99	Soluble K2O, Other (%)	0525	0.4257	0.0344	0.4328	0.0194	0.0194	9	-0.34	OK	0
050.99	Soluble K2O, Other (%)	0482	0.4300	0.0000	0.4328	0.0194	0.0194	9	-0.14	OK	0
050.99	Soluble K2O, Other (%)	0527	0.4321	0.0071	0.4328	0.0194	0.0194	9	-0.04	OK	0
050.99	Soluble K2O, Other (%)	0451	0.4475	0.0210	0.4328	0.0194	0.0194	9	0.70	OK	0
050.99	Soluble K2O, Other (%)	0389	0.4500	0.0000	0.4328	0.0194	0.0194	9	0.81	OK	0
050.99	Soluble K2O, Other (%)	0542	0.4950	0.0900	0.4328	0.0194	0.0194	9	2.95	OK	0
050.99	Soluble K2O, Other (%)	0325	0.5000	0.2000	0.4328	0.0194	0.0194	9	3.19	OK	1
050.99	Soluble K2O, Other (%)	0556	0.0000	0.0000	0.4328	0.0194	0.0194	9			4
060.00	Water (Free), Vacuum Oven (%)	0416	0.9123	0.1152	1.046	0.1450	0.1684	3	-0.92		0
060.00	Water (Free), Vacuum Oven (%)	0456	1.025	0.0500	1.046	0.1450	0.1684	3	-0.14		0
060.00	Water (Free), Vacuum Oven (%)	0096	1.200	0.3400	1.046	0.1450	0.1684	3	1.06		0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours, 5g sample) (%)	0518	0.8450	0.0100	1.072	0.2697	0.0767	3	-0.84		0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours, 5g sample) (%)	0055	1.000	0.2000	1.072	0.2697	0.0767	3	-0.27		0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours, 5g sample) (%)	0513	1.370	0.0200	1.072	0.2697	0.0767	3	1.11		0
060.99	Water (Free), Other (%)	0510	0.8577	0.0030	1.198	0.2944	0.0910	3	-1.15		0
060.99	Water (Free), Other (%)	0055	1.360	0.2600	1.198	0.2944	0.0910	3	0.55		0
060.99	Water (Free), Other (%)	0513	1.375	0.0100	1.198	0.2944	0.0910	3	0.60		0
101.00	Acid Soluble Ca, AA, inorganic 965.09 (%)	0553	0.1000	0.0200				2			0
101.00	Acid Soluble Ca, AA, inorganic 965.09 (%)	0105	0.1945	0.0170				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				
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0420	0.2740	0.0074	0.3655	0.0635	0.0156	8	-1.32	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0472	0.3100	0.0000	0.3655	0.0635	0.0156	8	-0.80	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0035	0.3565	0.0510	0.3655	0.0635	0.0156	8	-0.13	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0482	0.3700	0.0000	0.3655	0.0635	0.0156	8	0.06	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0096	0.3720	0.0060	0.3655	0.0635	0.0156	8	0.09	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0451	0.3860	0.0440	0.3655	0.0635	0.0156	8	0.29	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0354	0.3950	0.0100	0.3655	0.0635	0.0156	8	0.42	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0483	0.6230	0.0060	0.3655	0.0635	0.0156	8	3.71	High	0
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	0423	0.3840	0.0040				2			0
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	0521	0.4927	0.0000				2			0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0106	0.3105	0.0776	0.4397	0.1657	0.0477	3	-0.78		0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0527	0.3820	0.0096	0.4397	0.1657	0.0477	3	-0.35		0
101.33	Acid Soluble Ca, ICP, 2017.02 (%)	0525	0.6265	0.0559	0.4397	0.1657	0.0477	3	1.13		0
101.99	Acid Soluble Ca, Other (%)	0368	0.3610	0.0017				2			0
101.99	Acid Soluble Ca, Other (%)	0389	0.3700	0.0000				2			0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (%)	0105	0.1075	0.0130				2			0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (%)	0553	0.1500	0.0000				2			0
121.03	Acid Soluble Mg, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	0105	0.1065	0.0070				1			0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0472	0.1150	0.0100	0.1497	0.0326	0.0067	7	-0.96	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0420	0.1203	0.0037	0.1497	0.0326	0.0067	7	-0.82	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0354	0.1400	0.0000	0.1497	0.0326	0.0067	7	-0.27	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0096	0.1500	0.0000	0.1497	0.0326	0.0067	7	0.01	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0482	0.1550	0.0100	0.1497	0.0326	0.0067	7	0.15	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0035	0.1690	0.0220	0.1497	0.0326	0.0067	7	0.54	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0483	0.2185	0.0010	0.1497	0.0326	0.0067	7	1.91	OK	0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (%)	0423	0.1500	0.0020				2			0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (%)	0521	0.1766	0.0000				2			0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0515	0.1245	0.0246	0.1501	0.0224	0.0216	3	-1.14		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0106	0.1596	0.0399	0.1501	0.0224	0.0216	3	0.42		0
121.33	Acid Soluble Mg, ICP, 2017.02 (%)	0527	0.1662	0.0002	0.1501	0.0224	0.0216	3	0.72		0
121.99	Acid Soluble Mg, Other (%)	0515	0.1235	0.0121	0.1348	0.0140	0.0044	3	-0.81		0
121.99	Acid Soluble Mg, Other (%)	0524	0.1305	0.0000	0.1348	0.0140	0.0044	3	-0.31		0
121.99	Acid Soluble Mg, Other (%)	0389	0.1505	0.0010	0.1348	0.0140	0.0044	3	1.12		0
131.00	Water Soluble Mg, AA (%)	0553	0.1200	0.0000				1			0
143.00	Elemental S, Gravimetric Sulfur - carbon disulfide soluble sulfur (%)	0405	0.5710	0.0920				2			0
143.00	Elemental S, Gravimetric Sulfur - carbon disulfide soluble sulfur (%)	0231	18.95	0.1000				2			0
143.99	Elemental S, Other (%)	0472	17.15	0.1100	19.19	1.224	0.5714	5	-1.67		0
143.99	Elemental S, Other (%)	0481	19.00	0.5600	19.19	1.224	0.5714	5	-0.16		0
143.99	Elemental S, Other (%)	0368	19.71	0.3170	19.19	1.224	0.5714	5	0.42		0
143.99	Elemental S, Other (%)	0389	20.01	0.1400	19.19	1.224	0.5714	5	0.67		0
143.99	Elemental S, Other (%)	0255	20.10	1.730	19.19	1.224	0.5714	5	0.74		0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0106	18.77	0.0300	19.40	0.5766	0.2046	9	-1.01	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0444	18.92	0.2000	19.40	0.5766	0.2046	9	-0.77	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0544	19.03	0.0100	19.40	0.5766	0.2046	9	-0.60	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0485	19.21	0.0018	19.40	0.5766	0.2046	9	-0.31	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0522	19.23	0.0400	19.40	0.5766	0.2046	9	-0.27	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0405	19.36	0.0500	19.40	0.5766	0.2046	9	-0.07	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				
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0550	19.88	0.6100	19.40	0.5766	0.2046	9	0.76	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0027	20.05	0.0400	19.40	0.5766	0.2046	9	1.04	NA	0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0095	20.16	0.8600	19.40	0.5766	0.2046	9	1.22	NA	0
148.00	Total S, Combustion (20%)	0136	16.77	0.4900	19.17	1.746	0.3326	7	-1.25	Low	0
148.00	Total S, Combustion (20%)	0131	18.15	0.1000	19.17	1.746	0.3326	7	-0.53	Low	0
148.00	Total S, Combustion (20%)	0025	19.12	0.1600	19.17	1.746	0.3326	7	-0.03	OK	0
148.00	Total S, Combustion (20%)	0114	19.15	0.2200	19.17	1.746	0.3326	7	-0.01	OK	0
148.00	Total S, Combustion (20%)	0029	19.33	0.6200	19.17	1.746	0.3326	7	0.08	OK	0
148.00	Total S, Combustion (20%)	0049	19.89	0.1380	19.17	1.746	0.3326	7	0.37	OK	0
148.00	Total S, Combustion (20%)	0451	21.80	0.6000	19.17	1.746	0.3326	7	1.36	High	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0230	18.95	0.5000	19.68	0.7201	0.2296	11	-1.01	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0476	19.11	0.1500	19.68	0.7201	0.2296	11	-0.80	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0534	19.20	0.4000	19.68	0.7201	0.2296	11	-0.66	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0444	19.22	0.3200	19.68	0.7201	0.2296	11	-0.64	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0513	19.29	0.0800	19.68	0.7201	0.2296	11	-0.54	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0029	19.50	0.0000	19.68	0.7201	0.2296	11	-0.25	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0055	19.68	0.1200	19.68	0.7201	0.2296	11	0.00	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0405	19.93	0.1300	19.68	0.7201	0.2296	11	0.34	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0561	20.08	0.0100	19.68	0.7201	0.2296	11	0.55	OK	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0510	20.87	0.2428	19.68	0.7201	0.2296	11	1.65	High	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0526	21.20	0.5723	19.68	0.7201	0.2296	11	2.12	High	0
148.01	Total S, Gravimetric - sulfate and elemental (20%)	0485	0.0000	0.0000	19.68	0.7201	0.2296	11			4
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0515	15.30	0.4430	18.97	0.7982	0.2874	17	-4.59	Low	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0486	17.76	0.1000	18.97	0.7982	0.2874	17	-1.52	Low	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0421	18.25	0.1000	18.97	0.7982	0.2874	17	-0.90	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0292	18.28	0.2700	18.97	0.7982	0.2874	17	-0.87	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0117	18.46	0.2030	18.97	0.7982	0.2874	17	-0.64	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0023	18.54	0.0100	18.97	0.7982	0.2874	17	-0.55	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0040	18.85	0.3000	18.97	0.7982	0.2874	17	-0.15	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0546	18.87	0.3360	18.97	0.7982	0.2874	17	-0.12	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0177	19.19	0.0207	18.97	0.7982	0.2874	17	0.28	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0037	19.23	0.9140	18.97	0.7982	0.2874	17	0.32	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0521	19.25	0.0000	18.97	0.7982	0.2874	17	0.35	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0233	19.30	0.1600	18.97	0.7982	0.2874	17	0.41	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0527	19.41	0.4786	18.97	0.7982	0.2874	17	0.54	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0555	19.67	0.7112	18.97	0.7982	0.2874	17	0.88	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0043	19.77	0.4000	18.97	0.7982	0.2874	17	1.00	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0525	19.77	0.1400	18.97	0.7982	0.2874	17	1.00	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0402	20.12	0.3000	18.97	0.7982	0.2874	17	1.44	High	0
148.07	Total S, ICP, test portion as in 2017.02 (20%)	0483	18.20	3.000	18.97	0.7982	0.2874	17	-0.97	OK	1
148.99	Total S, Other (20%)	0096	18.13	0.0700	19.16	0.7472	0.2755	11	-1.29	Low	0
148.99	Total S, Other (20%)	0354	18.20	1.000	19.16	0.7472	0.2755	11	-1.20	OK	0
148.99	Total S, Other (20%)	0433	18.24	0.1100	19.16	0.7472	0.2755	11	-1.16	OK	0
148.99	Total S, Other (20%)	0371	19.07	0.2500	19.16	0.7472	0.2755	11	-0.12	OK	0
148.99	Total S, Other (20%)	0506	19.30	0.0000	19.16	0.7472	0.2755	11	0.18	OK	0
148.99	Total S, Other (20%)	0523	19.45	0.1000	19.16	0.7472	0.2755	11	0.36	OK	0
148.99	Total S, Other (20%)	0553	19.50	0.0000	19.16	0.7472	0.2755	11	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				
148.99	Total S, Other (20%)	0482	19.60	0.4000	19.16	0.7472	0.2755	11	0.55	OK	0
148.99	Total S, Other (20%)	0560	19.73	0.2600	19.16	0.7472	0.2755	11	0.72	OK	0
148.99	Total S, Other (20%)	0422	19.74	0.8100	19.16	0.7472	0.2755	11	0.72	OK	0
148.99	Total S, Other (20%)	0520	19.81	0.0300	19.16	0.7472	0.2755	11	0.81	OK	0
149.02	S - HNO3 soluble, Turbidimetric, modification of JAOAC 63.845 (%)	0518	19.80	0.2000				1			0
149.04	S - HNO3 soluble, ICP (%)	0423	18.38	0.0500	19.23	0.7999	0.2779	3	-1.07		0
149.04	S - HNO3 soluble, ICP (%)	0524	19.36	0.6637	19.23	0.7999	0.2779	3	0.16		0
149.04	S - HNO3 soluble, ICP (%)	0501	19.96	0.1200	19.23	0.7999	0.2779	3	0.91		0
151.00	Acid Soluble As, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	0.3655	0.0070				1			0
151.30	Acid Soluble As, ICP (ppm)	0255	0.3470	0.0440	0.6898	0.4775	0.0567	4	-0.61		0
151.30	Acid Soluble As, ICP (ppm)	0086	0.4673	0.0175	0.6898	0.4775	0.0567	4	-0.40		0
151.30	Acid Soluble As, ICP (ppm)	0389	0.5498	0.0954	0.6898	0.4775	0.0567	4	-0.25		0
151.30	Acid Soluble As, ICP (ppm)	0524	1.395	0.0700	0.6898	0.4775	0.0567	4	1.25		0
151.30	Acid Soluble As, ICP (ppm)	0555	0.0000	0.0000	0.6898	0.4775	0.0567	4			4
151.30	Acid Soluble As, ICP (ppm)	0027	< 0.002		0.6898	0.4775	0.0567	4			5
151.30	Acid Soluble As, ICP (ppm)	0405	< 1		0.6898	0.4775	0.0567	4			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0136	0.5780	0.0900				2			0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0527	1.307	0.1866				2			0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0515	0.0000	0.0000				2			4
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0117	< 10					2			5
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0368	4.343	0.4916				1			0
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				1			4
151.99	Acid Soluble As, Other (ppm)	0519	0.3650	0.0100				2			0
151.99	Acid Soluble As, Other (ppm)	0476	0.6439	0.0435				2			0
151.99	Acid Soluble As, Other (ppm)	0481	< 0.5					2			5
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0354	< 0.01					0			5
165.99	Acid Soluble B, Other (%)	0423	0.0010	0.0000	0.0026	0.0028	0.0002	4	-0.58		0
165.99	Acid Soluble B, Other (%)	0483	0.0012	0.0006	0.0026	0.0028	0.0002	4	-0.51		0
165.99	Acid Soluble B, Other (%)	0524	0.0015	0.0000	0.0026	0.0028	0.0002	4	-0.40		0
165.99	Acid Soluble B, Other (%)	0527	0.0069	0.0003	0.0026	0.0028	0.0002	4	1.50		0
165.99	Acid Soluble B, Other (%)	0515	0.0000	0.0000	0.0026	0.0028	0.0002	4			4
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	0.1170	0.0140				1			0
181.00	Acid Soluble Cd, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	< 0.0028					1			5
181.30	Acid Soluble Cd, ICP (ppm)	0255	0.0580	0.0320	0.1884	0.1002	0.0100	5	-1.14		0
181.30	Acid Soluble Cd, ICP (ppm)	0405	0.1350	0.0100	0.1884	0.1002	0.0100	5	-0.46		0
181.30	Acid Soluble Cd, ICP (ppm)	0389	0.1720	0.0000	0.1884	0.1002	0.0100	5	-0.14		0
181.30	Acid Soluble Cd, ICP (ppm)	0523	0.2840	0.0040	0.1884	0.1002	0.0100	5	0.83		0
181.30	Acid Soluble Cd, ICP (ppm)	0524	0.2930	0.0041	0.1884	0.1002	0.0100	5	0.91		0
181.30	Acid Soluble Cd, ICP (ppm)	0555	0.0000	0.0000	0.1884	0.1002	0.0100	5			4
181.30	Acid Soluble Cd, ICP (ppm)	0027	< 0.002		0.1884	0.1002	0.0100	5			5
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	0521	0.9860	0.0000				1			0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0136	0.1315	0.0110				1			0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0527	< 0.0001					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)	0368	< 0.05					0			5
181.99	Acid Soluble Cd, Other (ppm)	0519	0.0750	0.0100	0.0886	0.0175	0.0052	3	-0.78		0
181.99	Acid Soluble Cd, Other (ppm)	0506	0.0825	0.0010	0.0886	0.0175	0.0052	3	-0.35		0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
181.99	Acid Soluble Cd, Other (ppm)	0476	0.1084	0.0047	0.0886	0.0175	0.0052	3	1.13		0
181.99	Acid Soluble Cd, Other (ppm)	0481	< 0.5		0.0886	0.0175	0.0052	3			5
191.00	Acid Soluble Cr, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	5.004	2.125				2			0
191.00	Acid Soluble Cr, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	11.61	1.350				2			0
191.30	Acid Soluble Cr, ICP (ppm)	0524	6.845	0.3100	10.14	1.212	0.8907	9	-2.51	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0523	9.019	0.0560	10.14	1.212	0.8907	9	-0.85	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0555	9.680	1.100	10.14	1.212	0.8907	9	-0.35	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0405	10.00	0.0000	10.14	1.212	0.8907	9	-0.11	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0096	10.20	1.600	10.14	1.212	0.8907	9	0.05	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0482	10.30	0.2000	10.14	1.212	0.8907	9	0.12	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0389	10.62	0.1300	10.14	1.212	0.8907	9	0.36	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0444	11.36	2.720	10.14	1.212	0.8907	9	0.93	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0035	11.75	1.900	10.14	1.212	0.8907	9	1.23	NA	0
191.30	Acid Soluble Cr, ICP (ppm)	0027	< 0.002		10.14	1.212	0.8907	9			5
191.30	Acid Soluble Cr, ICP (ppm)	0561	< 1		10.14	1.212	0.8907	9			5
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	0521	9.432	0.0000				1			0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0136	8.500	1.000	11.26	1.918	0.4929	4	-1.44		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0527	11.76	0.2277	11.26	1.918	0.4929	4	0.26		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0037	11.84	0.0740	11.26	1.918	0.4929	4	0.30		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0515	12.94	0.6700	11.26	1.918	0.4929	4	0.88		0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0368	8.453	0.5930				2			0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0515	8.700	1.194				2			0
191.99	Acid Soluble Cr, Other (ppm)	0519	6.010	0.0200	9.208	2.912	0.2796	3	-1.10		0
191.99	Acid Soluble Cr, Other (ppm)	0506	9.905	0.0300	9.208	2.912	0.2796	3	0.24		0
191.99	Acid Soluble Cr, Other (ppm)	0476	11.71	0.7889	9.208	2.912	0.2796	3	0.86		0
191.99	Acid Soluble Cr, Other (ppm)	0481	< 20		9.208	2.912	0.2796	3			5
202.00	Acid Soluble Co, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	18.29	0.0000				1			0
202.30	Acid Soluble Co, ICP (ppm)	0561	2.850	0.1000	3.686	0.8050	0.0380	6	-0.92	OK	0
202.30	Acid Soluble Co, ICP (ppm)	0524	3.021	0.0749	3.686	0.8050	0.0380	6	-0.74	OK	0
202.30	Acid Soluble Co, ICP (ppm)	0523	3.485	0.0530	3.686	0.8050	0.0380	6	-0.22	OK	0
202.30	Acid Soluble Co, ICP (ppm)	0405	3.800	0.0000	3.686	0.8050	0.0380	6	0.13	OK	0
202.30	Acid Soluble Co, ICP (ppm)	0482	4.300	0.0000	3.686	0.8050	0.0380	6	0.68	OK	0
202.30	Acid Soluble Co, ICP (ppm)	0389	4.660	0.0000	3.686	0.8050	0.0380	6	1.08	OK	0
202.30	Acid Soluble Co, ICP (ppm)	0035	4.835	0.6700	3.686	0.8050	0.0380	6	1.27	OK	1
202.30	Acid Soluble Co, ICP (ppm)	0555	0.0000	0.0000	3.686	0.8050	0.0380	6			4
202.30	Acid Soluble Co, ICP (ppm)	0027	< 0.002		3.686	0.8050	0.0380	6			5
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0423	4.940	0.0400				2			0
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0521	5.495	0.0000				2			0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0550	2.045	0.0100	3.887	1.309	0.1365	5	-1.41		0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0136	3.000	0.0000	3.887	1.309	0.1365	5	-0.68		0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0527	4.513	0.0851	3.887	1.309	0.1365	5	0.48		0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0546	4.757	0.5704	3.887	1.309	0.1365	5	0.66		0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0037	5.122	0.0170	3.887	1.309	0.1365	5	0.94		0
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0368	4.748	0.2976				1			0
202.99	Acid Soluble Co, Other (ppm)	0519	0.1250	0.0100	3.607	3.130	0.0784	4	-1.11		0
202.99	Acid Soluble Co, Other (ppm)	0255	2.519	0.0220	3.607	3.130	0.0784	4	-0.35		0
202.99	Acid Soluble Co, Other (ppm)	0476	4.214	0.0617	3.607	3.130	0.0784	4	0.19		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				
202.99	Acid Soluble Co, Other (ppm)	0506	7.570	0.2200	3.607	3.130	0.0784	4	1.27		0
202.99	Acid Soluble Co, Other (ppm)	0481	< 10		3.607	3.130	0.0784	4			5
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	0105	0.0044	0.0009	0.0064	0.0025	0.0003	4	-0.83		0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	0485	0.0056	0.0001	0.0064	0.0025	0.0003	4	-0.34		0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	0550	0.0057	0.0002	0.0064	0.0025	0.0003	4	-0.28		0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (%)	0553	0.0100	0.0000	0.0064	0.0025	0.0003	4	1.45		0
221.01	Acid Soluble Cu, AA, organic 965.09 (%)	0498	0.0060	0.0000				1			0
221.03	Acid Soluble Cu, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	0526	0.0045	0.0010				2			0
221.03	Acid Soluble Cu, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	0105	0.0055	0.0009				2			0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0096	0.0054	0.0004	0.0072	0.0023	0.0004	8	-0.72	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0041	0.0055	0.0010	0.0072	0.0023	0.0004	8	-0.68	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0035	0.0057	0.0004	0.0072	0.0023	0.0004	8	-0.60	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0483	0.0061	0.0000	0.0072	0.0023	0.0004	8	-0.44	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0402	0.0063	0.0004	0.0072	0.0023	0.0004	8	-0.36	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0444	0.0085	0.0010	0.0072	0.0023	0.0004	8	0.53	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0472	0.0100	0.0000	0.0072	0.0023	0.0004	8	1.14	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0482	0.0100	0.0000	0.0072	0.0023	0.0004	8	1.14	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0255	0.0065	0.0030	0.0072	0.0023	0.0004	8	-0.28	OK	1
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0354	< 0.01		0.0072	0.0023	0.0004	8			5
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	0095	0.0049	0.0007	0.0055	0.0006	0.0003	3	-1.04		0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	0043	0.0055	0.0002	0.0055	0.0006	0.0003	3	0.09		0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (%)	0423	0.0060	0.0000	0.0055	0.0006	0.0003	3	0.95		0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0136	0.0040	0.0000	0.0053	0.0010	0.0001	7	-1.22	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0515	0.0047	0.0001	0.0053	0.0010	0.0001	7	-0.61	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0106	0.0053	0.0003	0.0053	0.0010	0.0001	7	-0.05	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0233	0.0054	0.0002	0.0053	0.0010	0.0001	7	0.10	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0527	0.0055	0.0001	0.0053	0.0010	0.0001	7	0.14	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0546	0.0056	0.0000	0.0053	0.0010	0.0001	7	0.28	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0555	0.0070	0.0002	0.0053	0.0010	0.0001	7	1.60	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (%)	0037	56.23	2.410	0.0053	0.0010	0.0001	7	52880.40	High	2
221.99	Acid Soluble Cu, Other (%)	0524	0.0045	0.0000	0.0051	0.0004	0.0001	9	-1.23	OK	0
221.99	Acid Soluble Cu, Other (%)	0476	0.0047	0.0001	0.0051	0.0004	0.0001	9	-0.90	OK	0
221.99	Acid Soluble Cu, Other (%)	0515	0.0049	0.0001	0.0051	0.0004	0.0001	9	-0.46	OK	0
221.99	Acid Soluble Cu, Other (%)	0506	0.0050	0.0000	0.0051	0.0004	0.0001	9	-0.13	OK	0
221.99	Acid Soluble Cu, Other (%)	0523	0.0050	0.0000	0.0051	0.0004	0.0001	9	-0.13	OK	0
221.99	Acid Soluble Cu, Other (%)	0368	0.0052	0.0002	0.0051	0.0004	0.0001	9	0.31	OK	0
221.99	Acid Soluble Cu, Other (%)	0389	0.0053	0.0001	0.0051	0.0004	0.0001	9	0.42	OK	0
221.99	Acid Soluble Cu, Other (%)	0028	0.0054	0.0002	0.0051	0.0004	0.0001	9	0.75	OK	0
221.99	Acid Soluble Cu, Other (%)	0481	0.0060	0.0000	0.0051	0.0004	0.0001	9	2.06	OK	0
221.99	Acid Soluble Cu, Other (%)	0405	< 0.5		0.0051	0.0004	0.0001	9			5
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	0553	1.090	0.0000				2			0
241.00	Acid Soluble Fe, AA, inorganic 965.09 (%)	0105	1.156	0.0270				2			0
241.03	Acid Soluble Fe, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	0105	0.9820	0.0820				1			0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0096	1.105	0.0100	1.184	0.0841	0.0238	8	-0.86	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0354	1.125	0.0100	1.184	0.0841	0.0238	8	-0.65	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0402	1.135	0.0100	1.184	0.0841	0.0238	8	-0.54	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0472	1.135	0.0100	1.184	0.0841	0.0238	8	-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				
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0451	1.160	0.0600	1.184	0.0841	0.0238	8	-0.27	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0482	1.260	0.0000	1.184	0.0841	0.0238	8	0.82	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0035	1.270	0.0600	1.184	0.0841	0.0238	8	0.93	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0483	1.285	0.0300	1.184	0.0841	0.0238	8	1.09	OK	0
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (%)	0423	1.115	0.0100				2			0
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (%)	0521	2.090	0.0000				2			0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0525	1.041	0.1420	1.106	0.0506	0.0609	6	-1.15	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0515	1.066	0.0137	1.106	0.0506	0.0609	6	-0.70	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0055	1.100	0.0800	1.106	0.0506	0.0609	6	-0.11	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0527	1.143	0.0097	1.106	0.0506	0.0609	6	0.65	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0106	1.143	0.1145	1.106	0.0506	0.0609	6	0.65	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (%)	0546	1.143	0.0055	1.106	0.0506	0.0609	6	0.66	OK	0
241.99	Acid Soluble Fe, Other (%)	0389	1.047	0.0080	1.149	0.0803	0.0384	4	-1.27		0
241.99	Acid Soluble Fe, Other (%)	0515	1.143	0.0001	1.149	0.0803	0.0384	4	-0.07		0
241.99	Acid Soluble Fe, Other (%)	0524	1.163	0.0639	1.149	0.0803	0.0384	4	0.18		0
241.99	Acid Soluble Fe, Other (%)	0368	1.242	0.0814	1.149	0.0803	0.0384	4	1.16		0
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	1.138	0.6740				1			0
251.00	Acid Soluble Pb, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	< 0.013					1			5
251.30	Acid Soluble Pb, ICP (ppm)	0255	1.189	0.7270	1.591	0.3223	0.2594	6	-1.11	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0389	1.351	0.0110	1.591	0.3223	0.2594	6	-0.67	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0524	1.564	0.0286	1.591	0.3223	0.2594	6	-0.08	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0482	1.695	0.2900	1.591	0.3223	0.2594	6	0.29	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0405	1.800	0.2000	1.591	0.3223	0.2594	6	0.58	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0096	1.950	0.3000	1.591	0.3223	0.2594	6	0.99	NA	0
251.30	Acid Soluble Pb, ICP (ppm)	0555	0.0000	0.0000	1.591	0.3223	0.2594	6			4
251.30	Acid Soluble Pb, ICP (ppm)	0027	< 0.002		1.591	0.3223	0.2594	6			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0136	1.335	0.1500	2.372	1.499	0.1429	3	-0.69		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0527	1.690	0.0366	2.372	1.499	0.1429	3	-0.45		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0515	4.090	0.2420	2.372	1.499	0.1429	3	1.15		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0117	< 5		2.372	1.499	0.1429	3			5
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0368	< 0.8					0			5
251.99	Acid Soluble Pb, Other (ppm)	0506	0.5110	0.0020	1.045	0.3740	0.0263	4	-1.43		0
251.99	Acid Soluble Pb, Other (ppm)	0519	1.060	0.0010	1.045	0.3740	0.0263	4	0.04		0
251.99	Acid Soluble Pb, Other (ppm)	0476	1.303	0.0521	1.045	0.3740	0.0263	4	0.69		0
251.99	Acid Soluble Pb, Other (ppm)	0481	1.305	0.0500	1.045	0.3740	0.0263	4	0.70		0
261.00	Acid Soluble Mn, AA, Mn2+ only (%)	0553	0.0100	0.0000				1			0
261.12	Acid Soluble Mn, AA, inorganic 965.09 (%)	0105	0.0035	0.0001				1			0
261.15	Acid Soluble Mn, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	0105	0.0033	0.0002				1			0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0096	0.0041	0.0000				2			0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0035	0.0044	0.0001				2			0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0354	< 0.01					2			5
261.34	Acid Soluble Mn, ICP, test portion 2006.03A-C (%)	0423	0.0040	0.0000				1			0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0106	0.0030	0.0021	0.0036	0.0006	0.0007	3	-1.13		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0546	0.0038	0.0000	0.0036	0.0006	0.0007	3	0.35		0
261.35	Acid Soluble Mn, ICP, 2017.02 (%)	0527	0.0041	0.0001	0.0036	0.0006	0.0007	3	0.78		0
261.99	Acid Soluble Mn, Other (%)	0515	0.0026	0.0007	0.0034	0.0008	0.0002	3	-1.15		0
261.99	Acid Soluble Mn, Other (%)	0524	0.0038	0.0000	0.0034	0.0008	0.0002	3	0.51		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				
261.99	Acid Soluble Mn, Other (%)	0389	0.0039	0.0000	0.0034	0.0008	0.0002	3	0.64		0
281.00	Acid Soluble Hg, AA (ppm)	0550	0.0107	0.0035				1			0
281.30	Acid Soluble Hg, ICP (ppm)	0405	0.1000	0.0000				1			0
281.30	Acid Soluble Hg, ICP (ppm)	0527	< 0.0001					1			5
281.99	Acid Soluble Hg, Other (ppm)	0519	0.0300	0.0000	0.0844	0.0364	0.0066	4	-1.49		0
281.99	Acid Soluble Hg, Other (ppm)	0368	0.0984	0.0193	0.0844	0.0364	0.0066	4	0.38		0
281.99	Acid Soluble Hg, Other (ppm)	0476	0.1031	0.0029	0.0844	0.0364	0.0066	4	0.51		0
281.99	Acid Soluble Hg, Other (ppm)	0506	0.1060	0.0040	0.0844	0.0364	0.0066	4	0.60		0
281.99	Acid Soluble Hg, Other (ppm)	0481	< 0.5		0.0844	0.0364	0.0066	4			5
289.00	Acid Soluble Mo, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	1.755	1.290				1			0
289.30	Acid Soluble Mo, ICP (ppm)	0524	0.6463	0.0172	2.451	1.886	0.1704	6	-0.85	Low	0
289.30	Acid Soluble Mo, ICP (ppm)	0035	1.110	0.5210	2.451	1.886	0.1704	6	-0.63	OK	0
289.30	Acid Soluble Mo, ICP (ppm)	0389	1.960	0.0000	2.451	1.886	0.1704	6	-0.23	OK	0
289.30	Acid Soluble Mo, ICP (ppm)	0405	2.005	0.0500	2.451	1.886	0.1704	6	-0.21	OK	0
289.30	Acid Soluble Mo, ICP (ppm)	0255	4.486	0.4340	2.451	1.886	0.1704	6	0.96	High	0
289.30	Acid Soluble Mo, ICP (ppm)	0561	4.500	0.0000	2.451	1.886	0.1704	6	0.97	High	0
289.30	Acid Soluble Mo, ICP (ppm)	0555	0.0000	0.0000	2.451	1.886	0.1704	6			4
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0106	0.0003	0.0000	1.657	1.116	0.1122	4	-1.48		0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0546	1.992	0.0588	1.657	1.116	0.1122	4	0.30		0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0527	2.263	0.0198	1.657	1.116	0.1122	4	0.54		0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0037	2.372	0.3700	1.657	1.116	0.1122	4	0.64		0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0136	< 4		1.657	1.116	0.1122	4			5
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	0368	6.636	0.9981				1			0
289.99	Acid Soluble Mo, Other (ppm)	0476	1.906	0.0203				2			0
289.99	Acid Soluble Mo, Other (ppm)	0506	8.100	0.6800				2			0
289.99	Acid Soluble Mo, Other (ppm)	0481	< 50					2			5
291.00	Acid Soluble Ni, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	4.687	0.1050				1			0
291.30	Acid Soluble Ni, ICP (ppm)	0524	5.265	0.3062	6.906	0.7956	0.6096	9	-1.90	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0096	6.400	0.8000	6.906	0.7956	0.6096	9	-0.59	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0389	6.515	0.0100	6.906	0.7956	0.6096	9	-0.45	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0482	6.650	0.5000	6.906	0.7956	0.6096	9	-0.30	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0405	6.850	0.1000	6.906	0.7956	0.6096	9	-0.06	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0561	7.100	0.2000	6.906	0.7956	0.6096	9	0.23	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0444	7.205	1.850	6.906	0.7956	0.6096	9	0.35	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0035	7.620	1.720	6.906	0.7956	0.6096	9	0.83	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0521	15.32	0.0000	6.906	0.7956	0.6096	9	9.76	NA	0
291.30	Acid Soluble Ni, ICP (ppm)	0555	0.0000	0.0000	6.906	0.7956	0.6096	9			4
291.30	Acid Soluble Ni, ICP (ppm)	0027	< 0.002		6.906	0.7956	0.6096	9			5
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0515	4.789	1.950	6.820	1.775	0.5842	5	-1.14		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0136	5.000	0.0000	6.820	1.775	0.5842	5	-1.03		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0117	7.741	0.0320	6.820	1.775	0.5842	5	0.52		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0037	8.183	0.6470	6.820	1.775	0.5842	5	0.77		0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0527	8.389	0.2922	6.820	1.775	0.5842	5	0.88		0
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0515	4.299	0.2640				2			0
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0368	6.343	0.3180				2			0
291.99	Acid Soluble Ni, Other (ppm)	0519	4.455	0.0100	5.780	1.158	0.3551	6	-1.02	NA	0
291.99	Acid Soluble Ni, Other (ppm)	0481	5.095	0.0300	5.780	1.158	0.3551	6	-0.53	NA	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
291.99	Acid Soluble Ni, Other (ppm)	0506	5.620	0.2600	5.780	1.158	0.3551	6	-0.12	NA	0
291.99	Acid Soluble Ni, Other (ppm)	0255	5.628	0.5160	5.780	1.158	0.3551	6	-0.12	NA	0
291.99	Acid Soluble Ni, Other (ppm)	0476	6.593	0.5343	5.780	1.158	0.3551	6	0.63	NA	0
291.99	Acid Soluble Ni, Other (ppm)	0028	7.290	0.7800	5.780	1.158	0.3551	6	1.16	NA	0
301.00	Acid Soluble Se, AA, test portion 2006.03 modified w/dual acid (ppm)	0550	< 0.08					0			5
301.00	Acid Soluble Se, AA, test portion 2006.03 modified w/dual acid (ppm)	0526	< 0.23					0			5
301.30	Acid Soluble Se, ICP (ppm)	0524	0.4950	0.1300	0.9224	0.5191	0.4048	3	-0.82		0
301.30	Acid Soluble Se, ICP (ppm)	0086	0.7721	0.0845	0.9224	0.5191	0.4048	3	-0.29		0
301.30	Acid Soluble Se, ICP (ppm)	0405	1.500	1.000	0.9224	0.5191	0.4048	3	1.11		0
301.30	Acid Soluble Se, ICP (ppm)	0555	0.0000	0.0000	0.9224	0.5191	0.4048	3			4
301.30	Acid Soluble Se, ICP (ppm)	0027	< 0.002		0.9224	0.5191	0.4048	3			5
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0136	0.8985	0.0910				1			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0527	< 0.001					1			5
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0368	< 1.1					0			5
301.99	Acid Soluble Se, Other (ppm)	0519	0.0500	0.0000	0.5528	0.3082	0.1269	5	-1.63		0
301.99	Acid Soluble Se, Other (ppm)	0481	0.5250	0.0100	0.5528	0.3082	0.1269	5	-0.09		0
301.99	Acid Soluble Se, Other (ppm)	0389	0.6035	0.0590	0.5528	0.3082	0.1269	5	0.16		0
301.99	Acid Soluble Se, Other (ppm)	0255	0.7265	0.5210	0.5528	0.3082	0.1269	5	0.56		0
301.99	Acid Soluble Se, Other (ppm)	0476	0.8588	0.0444	0.5528	0.3082	0.1269	5	0.99		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0423	0.0675	0.0010	0.0731	0.0053	0.0039	3	-1.06		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0527	0.0739	0.0028	0.0731	0.0053	0.0039	3	0.14		0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0035	0.0780	0.0080	0.0731	0.0053	0.0039	3	0.92		0
311.99	Sodium, Other (%)	0096	0.0750	0.0100	0.0817	0.0115	0.0100	3	-0.58		0
311.99	Sodium, Other (%)	0482	0.0750	0.0100	0.0817	0.0115	0.0100	3	-0.58		0
311.99	Sodium, Other (%)	0354	0.0950	0.0100	0.0817	0.0115	0.0100	3	1.15		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0553	0.0100	0.0000	0.0112	0.0008	0.0006	4	-1.42		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0105	0.0113	0.0012	0.0112	0.0008	0.0006	4	0.17		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0550	0.0115	0.0007	0.0112	0.0008	0.0006	4	0.35		0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0485	0.0119	0.0004	0.0112	0.0008	0.0006	4	0.90		0
321.01	Acid Soluble Zn, AA, organic 965.09 (%)	0498	0.0100	0.0000				1			0
321.03	Acid Soluble Zn, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	0526	0.0100	0.0000				2			0
321.03	Acid Soluble Zn, AA, 965.09, test portion 2006.03A-C w/dual acid (%)	0105	0.0104	0.0001				2			0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0255	0.0100	0.0020	0.0110	0.0012	0.0009	10	-0.78	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0354	0.0100	0.0000	0.0110	0.0012	0.0009	10	-0.78	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0472	0.0100	0.0000	0.0110	0.0012	0.0009	10	-0.78	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0482	0.0100	0.0000	0.0110	0.0012	0.0009	10	-0.78	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0483	0.0109	0.0013	0.0110	0.0012	0.0009	10	-0.10	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0433	0.0110	0.0000	0.0110	0.0012	0.0009	10	0.02	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0035	0.0112	0.0017	0.0110	0.0012	0.0009	10	0.14	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0041	0.0115	0.0010	0.0110	0.0012	0.0009	10	0.42	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0444	0.0125	0.0010	0.0110	0.0012	0.0009	10	1.22	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0096	0.0140	0.0020	0.0110	0.0012	0.0009	10	2.42	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0561	< 1		0.0110	0.0012	0.0009	10			5
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0095	0.0071	0.0042	0.0108	0.0034	0.0017	3	-1.08		0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0423	0.0115	0.0010	0.0108	0.0034	0.0017	3	0.19		0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0521	0.0139	0.0000	0.0108	0.0034	0.0017	3	0.89		0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0136	0.0100	0.0000	28.49	59.80	0.4523	8	-0.44	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				
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0546	0.0103	0.0001	28.49	59.80	0.4523	8	-0.44	Low	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0515	0.0103	0.0010	28.49	59.80	0.4523	8	-0.44	Low	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0527	0.0106	0.0004	28.49	59.80	0.4523	8	-0.44	Low	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0043	0.0110	0.0000	28.49	59.80	0.4523	8	-0.44	Low	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0106	0.0111	0.0066	28.49	59.80	0.4523	8	-0.44	Low	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0037	113.3	2.110	28.49	59.80	0.4523	8	1.30	High	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0233	114.6	1.500	28.49	59.80	0.4523	8	1.32	High	0
321.99	Acid Soluble Zn, Other (%)	0027	0.0090	0.0000	0.0112	0.0021	0.0003	10	-1.07	OK	0
321.99	Acid Soluble Zn, Other (%)	0476	0.0090	0.0002	0.0112	0.0021	0.0003	10	-1.07	OK	0
321.99	Acid Soluble Zn, Other (%)	0389	0.0106	0.0001	0.0112	0.0021	0.0003	10	-0.32	OK	0
321.99	Acid Soluble Zn, Other (%)	0028	0.0108	0.0003	0.0112	0.0021	0.0003	10	-0.22	OK	0
321.99	Acid Soluble Zn, Other (%)	0515	0.0108	0.0014	0.0112	0.0021	0.0003	10	-0.20	OK	0
321.99	Acid Soluble Zn, Other (%)	0481	0.0110	0.0000	0.0112	0.0021	0.0003	10	-0.10	OK	0
321.99	Acid Soluble Zn, Other (%)	0506	0.0110	0.0000	0.0112	0.0021	0.0003	10	-0.10	OK	0
321.99	Acid Soluble Zn, Other (%)	0524	0.0114	0.0001	0.0112	0.0021	0.0003	10	0.07	OK	0
321.99	Acid Soluble Zn, Other (%)	0523	0.0160	0.0000	0.0112	0.0021	0.0003	10	2.33	OK	0
321.99	Acid Soluble Zn, Other (%)	0559	0.0305	0.0010	0.0112	0.0021	0.0003	10	9.36	High	0
321.99	Acid Soluble Zn, Other (%)	0368	111.9	1.133	0.0112	0.0021	0.0003	10	54306.67	High	2
321.99	Acid Soluble Zn, Other (%)	0405	< 1		0.0112	0.0021	0.0003	10			5
325.30	Water Soluble Zn, ICP (%)	0555	0.0129	0.0013				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.