

Method PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Methods: 116

Sample # 230511

Regular PT Scheme

Labs Reporting: 67

Silicon Fertilizer

Statistical Summary

Issue Date : 06/30/2023

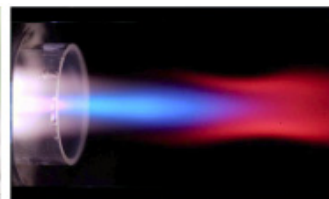
Method Code	Analyte & Method Sample # 230511	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Method Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	Method IA Ratio	Average Range (R-bar)	Horwitz %RSD
001.99	Ammoniacal N, Other (%)	2	0	0.0265	0.0364								
002.99	Nitrate N, Other (%)	1		0.0023									
005.99	Urea N, Other (%)	1		0.1250									
010.12	Total N, Salicylic (%)	1		0.0240									
010.60	Total N, Combustion (%)	6	5	2.956	7.103	3.547	0.4900	7.775	4.346	219.21%	36.97	0.0308	3.31%
010.99	Total N, Other (%)	1		0.0640									
020.50	Total P2O5, ICP (%)	6	5	0.3484	0.1852	0.4180		0.0804	0.0450	19.24%		0.0181	4.56%
020.99	Total P2O5, Other (%)	1		0.4096									
041.10	Direct Available P2O5, Gravimetric Quinolinium (%)	1		0.3850									
041.20	Direct Available P2O5, Spectrophotometric (%)	1		0.0475									
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext.	3	3	0.3557	0.0968	0.3557	0.6700	0.0968	0.0698	27.21%	0.34	0.0000	4.67%
041.50	Direct Available P2O5, ICP (%)	1		0.3345									
048.20	Water Soluble P2O5, Spectrophotometric (%)	1		0.0100									
050.50	Soluble K2O, ICP (Oxalate) (%)	1		0.1394									
050.51	Soluble K2O, ICP (Citrate) (%)	1		0.1000									
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	1		0.4435									
050.99	Soluble K2O, Other (%)	5	4	0.1479	0.0833	0.1849	0.4100	0.0117	0.0073	6.31%	0.07	0.0253	5.16%
060.99	Water (Free), Other (%)	2	2	0.5258	0.0909								
101.00	Acid Soluble Ca, AA, inorganic 965.09 (26.5%)	3	3	25.58	2.544	25.58	1.0000	2.544	1.836	9.95%	5.93	0.3767	1.98%
101.01	Acid Soluble Ca, AA, organic 965.09 (26.5%)	1		22.63									
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	14	13	25.96	1.023	25.77	1.0000	0.8704	0.3018	3.38%	2.03	0.3108	1.97%
101.31	Acid Soluble Ca, ICP, test portion organic 965.09 (26.5%)	1		26.33									
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (26.5%)	2	2	30.81	11.02								
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	21	21	25.42	1.764	25.36	1.0000	1.485	0.4049	5.85%	3.46	0.4441	1.99%
101.70	Acid Soluble Ca, Titrimetric (26.5%)	2	2	23.19	1.846								
101.99	Acid Soluble Ca, Other (26.5%)	12	11	25.72	1.443	25.89	1.0000	1.529	0.5763	5.91%	3.56	0.5567	1.97%
121.00	Acid Soluble Mg, AA, inorganic 965.09 (4.8%)	4	4	6.398	0.4789	6.398	0.5199	0.4789	0.2993	7.49%	2.15	0.2685	3.02%
121.01	Acid Soluble Mg, AA, organic 965.09 (4.8%)	1		6.990									
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	15	15	5.974	0.6077	6.008	0.5004	0.6157	0.1987	10.25%	2.87	0.2579	3.05%

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121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (4.8%)	4	4	6.090	0.6723	6.090	0.5045	0.6723	0.4202	11.04%	3.11	0.0770	3.05%
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	20	20	6.209	0.5830	6.222	0.5111	0.5484	0.1533	8.81%	2.50	0.1574	3.04%
121.70	Acid Soluble Mg, Titrimetric (EDTA) (4.8%)	1		2.680									
121.99	Acid Soluble Mg, Other (4.8%)	12	12	6.088	0.7749	6.081	0.5040	0.8635	0.3116	14.20%	3.99	0.2118	3.05%
131.70	Water Soluble Mg, Titrimetric (EDTA) (%)	1		7.277									
143.00	Elemental S, Gravimetric Sulfur - carbon disulfide soluble sulfu	1		0.4600									
143.99	Elemental S, Other (%)	4	4	0.3508	0.0671	0.3508		0.0671	0.0420	19.14%		0.0000	4.68%
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	1		0.1300									
148.00	Total S, Combustion (0.2%)	4	4	0.4306	0.1113	0.4306	0.2215	0.1113	0.0696	25.84%	1.17	0.0673	4.54%
148.01	Total S, Gravimetric - sulfate and elemental (0.2%)	2	2	0.1873	0.0725								
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	15	14	0.5024	0.4338	0.3809	0.2190	0.1102	0.0368	28.94%	1.17	0.0217	4.63%
148.99	Total S, Other (0.2%)	12	11	0.4302	0.3635	0.3090	0.2154	0.1870	0.0705	60.52%	2.02	0.0335	4.77%
149.04	S - HNO3 soluble, ICP (%)	2	2	0.2272	0.0384								
151.30	Acid Soluble As, ICP (ppm)	4	3	0.8049	0.7125	1.073		0.5741	0.4143	53.49%		0.0000	15.83%
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	1		0.2000									
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	6	4	21.44	26.17	30.66		28.26	17.66	92.16%		5.879	9.56%
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	2	0	0.2430	0.0806								
151.99	Acid Soluble As, Other (ppm)	3	3	1.017	0.7589	1.017		0.7589	0.5477	74.63%		0.0000	15.96%
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	3	3	0.0138	0.0065	0.0138	0.0051	0.0065	0.0047	47.39%	3.00	0.0000	7.62%
165.99	Acid Soluble B, Other (%)	8	6	0.3531	0.8111	0.0331	0.0080	0.0334	0.0170	100.80%	9.76	0.0097	6.68%
181.30	Acid Soluble Cd, ICP (ppm)	5	4	2.910	4.259	3.329		4.797	2.998	144.11%		0.0000	13.35%
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	8	3	3.072	4.923	5.463		7.925	5.719	145.07%		0.3562	12.39%
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	2	1	3.167	4.290								
181.99	Acid Soluble Cd, Other (ppm)	3	2	0.0812	0.0500	5.463		7.925	7.004	145.07%		0.3562	12.39%
190.00	Water Soluble Cl, Titrimetric (%)	1		0.1000									
191.30	Acid Soluble Cr, ICP (ppm)	5	5	1,243	395.1	1,243		395.1	220.9	31.79%		54.65	5.47%
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	8	8	1,408	267.7	1,408		303.5	134.1	21.55%		45.06	5.37%
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	2	2	1,519	118.8								
191.99	Acid Soluble Cr, Other (ppm)	2	2	1,366	259.8								
202.30	Acid Soluble Co, ICP (ppm)	4	4	55.90	12.65	55.90	17.7694	12.65	7.908	22.64%	1.66	0.0000	8.73%
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	1		18.90									
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	7	7	47.23	12.79	50.68	16.2049	5.021	2.372	9.91%	0.72	4.936	8.86%
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	2	2	23.24	6.555								
202.99	Acid Soluble Co, Other (ppm)	4	3	26.47	25.06	35.29	11.5875	21.80	15.73	61.77%	4.38	2.246	9.36%
221.00	Acid Soluble Cu, AA, inorganic 965.09 (0.003%)	2	1	0.0036	0.0020								
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	12	9	0.0226	0.0624	0.0032	0.0053	0.0028	0.0012	86.30%	1.22	0.0000	9.49%
221.31	Acid Soluble Cu, ICP, test portion organic 965.09 (0.003%)	1		0.0030									
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (0.003%)	2	2	0.0059	0.0058								
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	12	8	0.4189	1.443	0.0022	0.0052	0.0010	0.0004	43.51%	0.43	0.0000	10.05%
221.99	Acid Soluble Cu, Other (0.003%)	14	12	0.0038	0.0048	0.0026	0.0053	0.0014	0.0005	55.53%	0.63	0.0004	9.81%

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241.00	Acid Soluble Fe, AA, inorganic 965.09 (15.6%)	3	3	14.08	0.9744	14.08	1.0000	0.9744	0.7032	6.92%	2.27	0.0000	2.66%
241.01	Acid Soluble Fe, AA, organic 965.09 (15.6%)	1		12.54									
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	17	17	14.34	1.712	14.35	1.0000	1.547	0.4690	10.78%	3.60	0.2961	2.64%
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (15.6%)	2	2	14.44	1.018								
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	17	17	14.07	2.543	14.42	1.0000	1.284	0.3892	8.90%	2.99	0.4126	2.63%
241.99	Acid Soluble Fe, Other (15.6%)	15	15	14.88	1.605	15.07	1.0000	1.327	0.4283	8.81%	3.09	0.3905	2.58%
251.30	Acid Soluble Pb, ICP (ppm)	5	4	6.097	7.401	7.621		7.586	4.741	99.54%		0.0000	11.78%
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	1		17.65									
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	7	4	11.41	12.15	16.46		14.63	9.145	88.88%		1.799	10.49%
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	2	2	132.0	161.9								
251.99	Acid Soluble Pb, Other (ppm)	3	2	7.577	8.552	16.46		14.63	12.93	88.88%		1.799	10.49%
261.00	Acid Soluble Mn, AA, Mn2+ only (2.3%)	1		1.980									
261.12	Acid Soluble Mn, AA, inorganic 965.09 (2.3%)	3	3	1.591	0.1763	1.591	0.1641	0.1763	0.1273	11.08%	2.50	0.0530	3.73%
261.13	Acid Soluble Mn, AA, organic 965.09 (2.3%)	1		1.570									
261.14	Acid Soluble Mn, AA, 965.09, test portion 2006.03A-C (2.3%)	1		1.600									
261.30	Acid Soluble Mn, ICP, test portion 972.02a (2.3%)	7	7	1.652	0.1644	1.652	0.1702	0.1864	0.0881	11.28%	2.55	0.0341	3.71%
261.31	Acid Soluble Mn, ICP, test portion 972.02b (2.3%)	2	2	1.535	0.0424								
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (2.3%)	8	7	1.669	0.2596	1.666	0.1716	0.2811	0.1328	16.87%	3.82	0.0420	3.70%
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	16	16	1.574	0.1847	1.546	0.1596	0.1176	0.0367	7.60%	1.72	0.0459	3.75%
261.99	Acid Soluble Mn, Other (2.3%)	15	14	6.736	19.52	1.678	0.1728	0.2396	0.0800	14.28%	3.23	0.0572	3.70%
281.30	Acid Soluble Hg, ICP (ppm)	3	1	0.0370	0.0547	1.678		0.2396	0.2995	14.28%		0.0572	14.80%
281.99	Acid Soluble Hg, Other (ppm)	3	2	0.0215	0.0209	1.678		0.2396	0.2118	14.28%		0.0572	14.80%
289.30	Acid Soluble Mo, ICP (ppm)	3	3	28.12	17.17	28.12	9.4351	17.17	12.39	61.07%	4.24	0.0000	9.68%
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	1		26.85									
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	7	7	34.10	17.34	33.23	10.9704	17.65	8.341	53.12%	3.75	9.225	9.44%
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	2	2	16.99	0.8379								
289.99	Acid Soluble Mo, Other (ppm)	1		27.93									
291.30	Acid Soluble Ni, ICP (ppm)	4	4	140.2	119.4	140.2		119.4	74.66	85.20%		4.925	7.60%
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	1		123.0									
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	7	7	116.7	25.74	116.7		29.19	13.79	25.02%		4.991	7.82%
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	2	2	84.41	16.48								
291.99	Acid Soluble Ni, Other (ppm)	4	4	113.2	22.68	113.2		22.68	14.18	20.03%		14.26	7.85%
301.30	Acid Soluble Se, ICP (ppm)	3	3	3.521	1.418	3.521		1.418	1.023	40.27%		0.0000	13.24%
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	1		5.300									
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	4	1	24.44	32.28	3.521		1.418	1.772	40.27%		0.0000	13.24%
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	2	1	2.863	2.635								
301.99	Acid Soluble Se, Other (ppm)	4	3	3.746	2.627	4.994		1.001	0.7225	20.04%		0.4176	12.56%
311.00	Sodium, AA (%)	1		0.0990									
311.33	Sodium, ICP, test portion as in 2017.02 (%)	6	6	0.1018	0.0071	0.1018	0.0152	0.0081	0.0041	7.93%	1.24	0.0000	5.64%
311.99	Sodium, Other (%)	2	2	0.0911	0.0197								

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321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	1		0.0096									
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	7	6	0.0693	0.1613	0.0084	0.0058	0.0029	0.0015	34.95%	1.17	0.0000	8.22%
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	2	2	0.0082	0.0008								
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	10	9	0.0089	0.0018	0.0087	0.0059	0.0020	0.0008	22.59%	0.78	0.0004	8.18%
321.99	Acid Soluble Zn, Other (%)	7	7	0.0088	0.0037	0.0079	0.0058	0.0017	0.0008	21.10%	0.67	0.0007	8.29%
431.10	Soluble Si in nonliquids, Na2CO3-NH4NO3 extraction, spectro	2	2	0.5750	0.1061								
431.99	Soluble Si in nonliquids, Other (4%)	2	2	3.569	0.2496								

The Method IA Ratio = $2.33 * \text{Robust SD} / \text{IA at the Method Assigned Value}$. 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.



Method PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Sample # 230511

Regular PT Scheme

Silicon Fertilizer

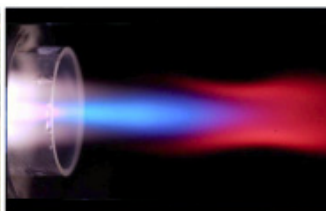
Method Precision Report

Issue Date : 06/30/2023

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
020.50	Total P2O5, ICP (%)	6	5	0.4180	0.0804	0.0796	0.0157	0.0812	19.05%	3.75%	19.42%	5.185
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	14	11	25.66	0.7225	0.7040	0.2292	0.7404	2.74%	0.89%	2.88%	3.230
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	21	20	25.17	1.391	1.362	0.4015	1.420	5.41%	1.59%	5.64%	3.536
101.99	Acid Soluble Ca, Other (26.5%)	12	11	25.85	1.443	1.392	0.5413	1.493	5.38%	2.09%	5.78%	2.759
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	15	15	5.974	0.6077	0.5851	0.2325	0.6296	9.79%	3.89%	10.54%	2.708
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	20	18	6.275	0.5043	0.4911	0.1620	0.5172	7.83%	2.58%	8.24%	3.192
121.99	Acid Soluble Mg, Other (4.8%)	12	12	6.088	0.7749	0.7652	0.1727	0.7844	12.57%	2.84%	12.89%	4.541
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	15	14	0.3948	0.1253	0.1245	0.0205	0.1261	31.53%	5.20%	31.95%	6.146
148.99	Total S, Other (0.2%)	12	11	0.3552	0.2667	0.2660	0.0277	0.2675	74.90%	7.81%	75.30%	9.644
165.99	Acid Soluble B, Other (%)	8	5	0.0231	0.0182	0.0176	0.0065	0.0188	76.24%	27.91%	81.19%	2.909
191.30	Acid Soluble Cr, ICP (ppm)	5	5	1,243	395.1	393.9	45.00	396.4	31.69%	3.62%	31.89%	8.809
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	8	8	1,408	267.7	266.7	32.04	268.6	18.94%	2.27%	19.07%	8.384
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	7	5	51.18	2.915	0.7017	4.001	4.062	1.37%	7.82%	7.94%	1.015
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	12	8	0.0046	0.0065	0.0065	0.0002	0.0065	140.97%	4.92%	141.05%	28.66
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	12	7	0.0020	0.0007	0.0007	0.0001	0.0007	33.11%	3.55%	33.30%	9.385
221.99	Acid Soluble Cu, Other (0.003%)	14	12	0.0026	0.0013	0.0012	0.0003	0.0013	48.48%	11.92%	49.92%	4.189
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	17	17	14.34	1.712	1.688	0.4049	1.736	11.77%	2.82%	12.11%	4.288
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	17	15	14.64	1.259	1.229	0.3912	1.289	8.39%	2.67%	8.81%	3.296
241.99	Acid Soluble Fe, Other (15.6%)	15	12	15.26	0.8591	0.8350	0.2853	0.8824	5.47%	1.87%	5.78%	3.093
261.30	Acid Soluble Mn, ICP, test portion 972.02a (2.3%)	7	6	1.697	0.1256	0.1246	0.0233	0.1267	7.34%	1.37%	7.47%	5.436
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (2.3%)	8	6	1.596	0.1796	0.1781	0.0330	0.1811	11.16%	2.07%	11.35%	5.481
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	16	15	1.534	0.0957	0.0913	0.0404	0.0998	5.95%	2.63%	6.51%	2.472
261.99	Acid Soluble Mn, Other (2.3%)	15	13	1.714	0.2627	0.2610	0.0425	0.2644	15.22%	2.48%	15.43%	6.214
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	7	7	34.10	17.34	16.16	8.914	18.45	47.39%	26.14%	54.12%	2.070
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	7	7	116.7	25.74	25.57	4.189	25.91	21.92%	3.59%	22.21%	6.185
311.33	Sodium, ICP, test portion as in 2017.02 (%)	6	5	0.1032	0.0070	0.0069	0.0009	0.0070	6.73%	0.90%	6.79%	7.565

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
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	7	5	0.0080	0.0027	0.0027	0.0000	0.0027	33.91%	0.56%	33.92%	60.67
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	10	9	0.0087	0.0017	0.0017	0.0004	0.0017	19.70%	4.21%	20.14%	4.782
321.99	Acid Soluble Zn, Other (%)	7	6	0.0074	0.0011	0.0010	0.0006	0.0011	13.07%	8.00%	15.32%	1.916

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



Method PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Methods: 116

Sample # 230511

Regular PT Scheme

Labs Reporting: 67

Silicon Fertilizer

Lab Values

Issue Date : 06/30/2023

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
001.99	Ammoniacal N, Other (%)	0524	0.0522	0.1044				0			4
001.99	Ammoniacal N, Other (%)	0553	< 0.0008					0			5
002.99	Nitrate N, Other (%)	0553	< 0.0023					0			5
005.99	Urea N, Other (%)	0524	0.1250	0.0500				1			0
010.12	Total N, Salicylic (%)	0568	0.0240	0.0000				1			0
010.60	Total N, Combustion (%)	0472	0.0015	0.0010	3.547	7.775	0.0308	5	-0.40		0
010.60	Total N, Combustion (%)	0588	0.0305	0.0019	3.547	7.775	0.0308	5	-0.39		0
010.60	Total N, Combustion (%)	0354	0.0675	0.0010	3.547	7.775	0.0308	5	-0.39		0
010.60	Total N, Combustion (%)	0624	0.1800	0.1000	3.547	7.775	0.0308	5	-0.38		0
010.60	Total N, Combustion (%)	0034	17.46	0.0500	3.547	7.775	0.0308	5	1.56		0
010.60	Total N, Combustion (%)	0422	0.0000	0.0000	3.547	7.775	0.0308	5			4
010.99	Total N, Other (%)	0524	0.0640	0.0149				1			0
020.50	Total P2O5, ICP (%)	0472	0.3350	0.0100	0.4180	0.0804	0.0181	5	-0.90		0
020.50	Total P2O5, ICP (%)	0588	0.3445	0.0330	0.4180	0.0804	0.0181	5	-0.80		0
020.50	Total P2O5, ICP (%)	0524	0.4131	0.0031	0.4180	0.0804	0.0181	5	-0.05		0
020.50	Total P2O5, ICP (%)	0527	0.4830	0.0108	0.4180	0.0804	0.0181	5	0.71		0
020.50	Total P2O5, ICP (%)	0422	0.5146	0.0337	0.4180	0.0804	0.0181	5	1.05		0
020.50	Total P2O5, ICP (%)	0552	0.0000	0.0000	0.4180	0.0804	0.0181	5			4
020.99	Total P2O5, Other (%)	0572	0.4096	0.0117				1			0
041.10	Direct Available P2O5, Gravimetric Quinolinium (%)	0009	0.3850	0.0100				1			0
041.20	Direct Available P2O5, Spectrophotometric (%)	0553	0.0475	0.0090				1			0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext.	0472	0.2500	0.0000	0.3557	0.0968	0.0000	3	-1.09		0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext.	0354	0.3770	0.0020	0.3557	0.0968	0.0000	3	0.22		0
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext.	0568	0.4400	0.0000	0.3557	0.0968	0.0000	3	0.87		0
041.50	Direct Available P2O5, ICP (%)	0624	0.3345	0.0510				1			0
048.20	Water Soluble P2O5, Spectrophotometric (%)	0472	0.0100	0.0000				1			0
050.50	Soluble K2O, ICP (Oxalate) (%)	0422	0.1394	0.0002				1			0
050.51	Soluble K2O, ICP (Citrate) (%)	0568	0.1000	0.0000				1			0
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	0354	0.4435	0.0030				1			0
050.99	Soluble K2O, Other (%)	0624	0.1685	0.0290	0.1849	0.0117	0.0253	4	-1.40		0
050.99	Soluble K2O, Other (%)	0588	0.1845	0.0630	0.1849	0.0117	0.0253	4	-0.03		0
050.99	Soluble K2O, Other (%)	0527	0.1926	0.0053	0.1849	0.0117	0.0253	4	0.66		0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
050.99	Soluble K2O, Other (%)	0524	0.1939	0.0037	0.1849	0.0117	0.0253	4	0.77		0
050.99	Soluble K2O, Other (%)	0552	0.0000	0.0000	0.1849	0.0117	0.0253	4			4
060.99	Water (Free), Other (%)	0510	0.4615	0.0130				2			0
060.99	Water (Free), Other (%)	0009	0.5900	0.0000				2			0
101.00	Acid Soluble Ca, AA, inorganic 965.09 (26.5%)	0485	22.65	0.5600	25.58	2.544	0.3767	3	-1.15		0
101.00	Acid Soluble Ca, AA, inorganic 965.09 (26.5%)	0029	26.84	0.4700	25.58	2.544	0.3767	3	0.49		0
101.00	Acid Soluble Ca, AA, inorganic 965.09 (26.5%)	0553	27.25	0.1000	25.58	2.544	0.3767	3	0.66		0
101.01	Acid Soluble Ca, AA, organic 965.09 (26.5%)	0580	22.63	0.2500				1			0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0377	24.54	0.5000	25.77	0.8704	0.3108	13	-1.41	Low	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0231	24.79	0.1500	25.77	0.8704	0.3108	13	-1.13	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0255	25.05	0.0300	25.77	0.8704	0.3108	13	-0.83	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0360	25.36	0.6000	25.77	0.8704	0.3108	13	-0.47	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0354	25.40	0.2000	25.77	0.8704	0.3108	13	-0.42	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0035	25.50	0.0000	25.77	0.8704	0.3108	13	-0.31	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0324	25.60	1.600	25.77	0.8704	0.3108	13	-0.19	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0568	26.00	0.0000	25.77	0.8704	0.3108	13	0.27	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0451	26.06	0.2100	25.77	0.8704	0.3108	13	0.33	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0619	26.40	0.6000	25.77	0.8704	0.3108	13	0.73	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0291	26.57	0.0100	25.77	0.8704	0.3108	13	0.92	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0433	26.66	0.2800	25.77	0.8704	0.3108	13	1.02	OK	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0452	28.40	0.0900	25.77	0.8704	0.3108	13	3.02	High	0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (26.5%)	0049	27.12	2.907	25.77	0.8704	0.3108	13	1.56	High	1
101.31	Acid Soluble Ca, ICP, test portion organic 965.09 (26.5%)	0023	26.33	0.4020				1			0
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (26.5%)	0073	23.02	0.4400				2			0
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (26.5%)	0220	38.60	29.86				2			0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0494	21.82	1.621	25.36	1.485	0.4441	21	-2.38	Low	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0009	23.00	0.0000	25.36	1.485	0.4441	21	-1.59	Low	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0086	23.88	0.8502	25.36	1.485	0.4441	21	-0.99	Low	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0055	24.12	0.1400	25.36	1.485	0.4441	21	-0.83	Low	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0472	24.29	0.1800	25.36	1.485	0.4441	21	-0.72	Low	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0543	24.47	0.4490	25.36	1.485	0.4441	21	-0.60	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0040	24.60	0.3600	25.36	1.485	0.4441	21	-0.51	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0106	24.81	0.2533	25.36	1.485	0.4441	21	-0.37	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0624	24.86	0.7500	25.36	1.485	0.4441	21	-0.34	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0177	25.05	0.0946	25.36	1.485	0.4441	21	-0.21	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0043	25.32	0.5100	25.36	1.485	0.4441	21	-0.03	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0233	25.32	0.2700	25.36	1.485	0.4441	21	-0.03	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0527	25.75	0.0823	25.36	1.485	0.4441	21	0.27	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0609	26.10	0.0000	25.36	1.485	0.4441	21	0.50	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0292	26.12	0.1400	25.36	1.485	0.4441	21	0.51	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0521	26.29	1.050	25.36	1.485	0.4441	21	0.62	OK	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0136	26.52	0.2500	25.36	1.485	0.4441	21	0.78	High	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0421	26.66	0.7200	25.36	1.485	0.4441	21	0.88	High	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0102	27.07	0.1600	25.36	1.485	0.4441	21	1.15	High	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0394	27.46	0.0960	25.36	1.485	0.4441	21	1.41	High	0
101.33	Acid Soluble Ca, ICP, 2017.02 (26.5%)	0515	30.35	1.810	25.36	1.485	0.4441	21	3.36	High	0
101.70	Acid Soluble Ca, Titrimetric (26.5%)	0510	21.88	0.1358				2			0
101.70	Acid Soluble Ca, Titrimetric (26.5%)	0230	24.50	0.5100				2			0
101.99	Acid Soluble Ca, Other (26.5%)	0368	23.12	0.0355	25.89	1.529	0.5567	11	-1.82	Low	0
101.99	Acid Soluble Ca, Other (26.5%)	0552	23.56	0.1300	25.89	1.529	0.5567	11	-1.53	Low	0
101.99	Acid Soluble Ca, Other (26.5%)	0587	25.44	0.1400	25.89	1.529	0.5567	11	-0.30	OK	0
101.99	Acid Soluble Ca, Other (26.5%)	0605	25.52	0.2000	25.89	1.529	0.5567	11	-0.24	OK	0
101.99	Acid Soluble Ca, Other (26.5%)	0389	25.74	0.0900	25.89	1.529	0.5567	11	-0.10	OK	0
101.99	Acid Soluble Ca, Other (26.5%)	0572	26.28	0.0378	25.89	1.529	0.5567	11	0.25	OK	0
101.99	Acid Soluble Ca, Other (26.5%)	0307	26.35	1.330	25.89	1.529	0.5567	11	0.29	OK	0
101.99	Acid Soluble Ca, Other (26.5%)	0619	26.40	0.6000	25.89	1.529	0.5567	11	0.33	OK	0
101.99	Acid Soluble Ca, Other (26.5%)	0523	26.96	1.160	25.89	1.529	0.5567	11	0.70	High	0
101.99	Acid Soluble Ca, Other (26.5%)	0027	26.97	1.160	25.89	1.529	0.5567	11	0.70	High	0
101.99	Acid Soluble Ca, Other (26.5%)	0515	27.99	1.240	25.89	1.529	0.5567	11	1.37	High	0
101.99	Acid Soluble Ca, Other (26.5%)	0042	24.35	4.050	25.89	1.529	0.5567	11	-1.01	Low	1
121.00	Acid Soluble Mg, AA, inorganic 965.09 (4.8%)	0485	5.965	0.2500	6.398	0.4789	0.2685	4	-0.90		0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (4.8%)	0040	6.010	0.1400	6.398	0.4789	0.2685	4	-0.81		0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (4.8%)	0553	6.725	0.3500	6.398	0.4789	0.2685	4	0.68		0
121.00	Acid Soluble Mg, AA, inorganic 965.09 (4.8%)	0029	6.891	0.3340	6.398	0.4789	0.2685	4	1.03		0
121.01	Acid Soluble Mg, AA, organic 965.09 (4.8%)	0580	6.990	0.2800				1			0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0619	4.785	0.4300	6.008	0.6157	0.2579	15	-1.99	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0234	4.880	0.6400	6.008	0.6157	0.2579	15	-1.83	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0255	5.228	0.0150	6.008	0.6157	0.2579	15	-1.27	Low	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0231	5.695	0.0700	6.008	0.6157	0.2579	15	-0.51	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0451	5.875	0.1110	6.008	0.6157	0.2579	15	-0.22	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0035	5.990	0.2200	6.008	0.6157	0.2579	15	-0.03	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0377	5.990	0.1600	6.008	0.6157	0.2579	15	-0.03	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0354	6.005	0.6100	6.008	0.6157	0.2579	15	0.00	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0324	6.170	0.2800	6.008	0.6157	0.2579	15	0.26	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0433	6.264	0.0740	6.008	0.6157	0.2579	15	0.42	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0049	6.355	0.6500	6.008	0.6157	0.2579	15	0.56	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0360	6.460	0.2000	6.008	0.6157	0.2579	15	0.73	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0291	6.490	0.0200	6.008	0.6157	0.2579	15	0.78	OK	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0568	6.550	0.0000	6.008	0.6157	0.2579	15	0.88	High	0
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (4.8%)	0452	6.875	0.1300	6.008	0.6157	0.2579	15	1.41	High	0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (4.8%)	0073	5.205	0.2100	6.090	0.6723	0.0770	4	-1.32		0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (4.8%)	0220	5.940	0.0600	6.090	0.6723	0.0770	4	-0.22		0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (4.8%)	0292	6.525	0.0300	6.090	0.6723	0.0770	4	0.65		0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (4.8%)	0023	6.691	0.0080	6.090	0.6723	0.0770	4	0.89		0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0624	4.792	0.2620	6.222	0.5484	0.1574	20	-2.61	Low	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0515	5.464	0.0910	6.222	0.5484	0.1574	20	-1.38	Low	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0009	5.750	0.1000	6.222	0.5484	0.1574	20	-0.86	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0055	5.780	0.5000	6.222	0.5484	0.1574	20	-0.81	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0043	5.900	0.1000	6.222	0.5484	0.1574	20	-0.59	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0521	5.905	0.2900	6.222	0.5484	0.1574	20	-0.58	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0177	5.929	0.0063	6.222	0.5484	0.1574	20	-0.53	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0494	6.033	0.6072	6.222	0.5484	0.1574	20	-0.34	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0106	6.048	0.3775	6.222	0.5484	0.1574	20	-0.32	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0233	6.076	0.1220	6.222	0.5484	0.1574	20	-0.27	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0394	6.100	0.0008	6.222	0.5484	0.1574	20	-0.22	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0117	6.347	0.0754	6.222	0.5484	0.1574	20	0.23	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0086	6.429	0.6995	6.222	0.5484	0.1574	20	0.38	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0136	6.480	0.0600	6.222	0.5484	0.1574	20	0.47	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0543	6.525	0.0990	6.222	0.5484	0.1574	20	0.55	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0527	6.620	0.0611	6.222	0.5484	0.1574	20	0.73	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0609	6.655	0.0300	6.222	0.5484	0.1574	20	0.79	OK	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0421	6.905	0.0700	6.222	0.5484	0.1574	20	1.25	High	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0472	7.115	0.0900	6.222	0.5484	0.1574	20	1.63	High	0
121.33	Acid Soluble Mg, ICP, 2017.02 (4.8%)	0102	7.320	0.1400	6.222	0.5484	0.1574	20	2.00	High	0
121.70	Acid Soluble Mg, Titrimetric (EDTA) (4.8%)	0230	2.680	0.4600				1			0
121.99	Acid Soluble Mg, Other (4.8%)	0042	4.785	0.1100	6.081	0.8635	0.2118	12	-1.50	Low	0
121.99	Acid Soluble Mg, Other (4.8%)	0619	4.785	0.4300	6.081	0.8635	0.2118	12	-1.50	Low	0
121.99	Acid Soluble Mg, Other (4.8%)	0515	5.488	0.2480	6.081	0.8635	0.2118	12	-0.69	Low	0
121.99	Acid Soluble Mg, Other (4.8%)	0307	5.960	0.1200	6.081	0.8635	0.2118	12	-0.14	OK	0
121.99	Acid Soluble Mg, Other (4.8%)	0605	6.025	0.1900	6.081	0.8635	0.2118	12	-0.06	OK	0
121.99	Acid Soluble Mg, Other (4.8%)	0368	6.099	0.1051	6.081	0.8635	0.2118	12	0.02	OK	0
121.99	Acid Soluble Mg, Other (4.8%)	0524	6.317	0.2436	6.081	0.8635	0.2118	12	0.27	OK	0
121.99	Acid Soluble Mg, Other (4.8%)	0552	6.320	0.0400	6.081	0.8635	0.2118	12	0.28	OK	0
121.99	Acid Soluble Mg, Other (4.8%)	0587	6.495	0.1100	6.081	0.8635	0.2118	12	0.48	OK	0
121.99	Acid Soluble Mg, Other (4.8%)	0572	6.553	0.1985	6.081	0.8635	0.2118	12	0.55	OK	0
121.99	Acid Soluble Mg, Other (4.8%)	0027	6.765	0.4100	6.081	0.8635	0.2118	12	0.79	High	0
121.99	Acid Soluble Mg, Other (4.8%)	0523	7.460	0.3400	6.081	0.8635	0.2118	12	1.60	High	0
131.70	Water Soluble Mg, Titrimetric (EDTA) (%)	0510	7.277	0.0167				1			0
143.00	Elemental S, Gravimetric Sulfur - carbon disulfide soluble sulfu	0106	0.4600	0.0400				1			0
143.99	Elemental S, Other (%)	0291	0.3075	0.0010	0.3508	0.0671	0.0000	4	-0.64		0
143.99	Elemental S, Other (%)	0368	0.3121	0.0101	0.3508	0.0671	0.0000	4	-0.58		0
143.99	Elemental S, Other (%)	0255	0.3335	0.0050	0.3508	0.0671	0.0000	4	-0.26		0
143.99	Elemental S, Other (%)	0389	0.4500	0.0000	0.3508	0.0671	0.0000	4	1.48		0
145.00	Sulfate S, HCl soluble, Gravimetric Sulfur - sulfate form (%)	0027	0.1300	0.0200				1			0
148.00	Total S, Combustion (0.2%)	0351	0.3300	0.0600	0.4306	0.1113	0.0673	4	-0.90		0
148.00	Total S, Combustion (0.2%)	0157	0.3465	0.0510	0.4306	0.1113	0.0673	4	-0.76		0
148.00	Total S, Combustion (0.2%)	0049	0.4850	0.0900	0.4306	0.1113	0.0673	4	0.49		0
148.00	Total S, Combustion (0.2%)	0073	0.5610	0.0680	0.4306	0.1113	0.0673	4	1.17		0
148.01	Total S, Gravimetric - sulfate and elemental (0.2%)	0485	0.1360	0.0020				2			0

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			Value	Range	Rob Mean	Rob SD	Rob R-bar				
148.01	Total S, Gravimetric - sulfate and elemental (0.2%)	0584	0.2385	0.0430				2			0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0117	0.2492	0.0114	0.3809	0.1102	0.0217	14	-1.19	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0043	0.2680	0.0160	0.3809	0.1102	0.0217	14	-1.02	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0292	0.3100	0.0000	0.3809	0.1102	0.0217	14	-0.64	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0494	0.3194	0.0348	0.3809	0.1102	0.0217	14	-0.56	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0619	0.3270	0.0260	0.3809	0.1102	0.0217	14	-0.49	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0421	0.3350	0.0100	0.3809	0.1102	0.0217	14	-0.42	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0624	0.3506	0.0141	0.3809	0.1102	0.0217	14	-0.27	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0023	0.3660	0.0620	0.3809	0.1102	0.0217	14	-0.13	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0136	0.3700	0.0200	0.3809	0.1102	0.0217	14	-0.10	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0515	0.3780	0.0350	0.3809	0.1102	0.0217	14	-0.03	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0394	0.4515	0.0046	0.3809	0.1102	0.0217	14	0.64	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0472	0.5150	0.0100	0.3809	0.1102	0.0217	14	1.22	OK	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0177	0.6275	0.0057	0.3809	0.1102	0.0217	14	2.24	High	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0102	0.6600	0.0600	0.3809	0.1102	0.0217	14	2.53	High	0
148.07	Total S, ICP, test portion as in 2017.02 (0.2%)	0543	2.009	0.8630	0.3809	0.1102	0.0217	14	14.77	High	1
148.99	Total S, Other (0.2%)	0354	0.0850	0.0100	0.3090	0.1870	0.0335	11	-1.20	Low	0
148.99	Total S, Other (0.2%)	0562	0.1700	0.0200	0.3090	0.1870	0.0335	11	-0.74	OK	0
148.99	Total S, Other (0.2%)	0600	0.1700	0.0200	0.3090	0.1870	0.0335	11	-0.74	OK	0
148.99	Total S, Other (0.2%)	0559	0.1750	0.0100	0.3090	0.1870	0.0335	11	-0.72	OK	0
148.99	Total S, Other (0.2%)	0452	0.2900	0.0000	0.3090	0.1870	0.0335	11	-0.10	OK	0
148.99	Total S, Other (0.2%)	0605	0.2900	0.0400	0.3090	0.1870	0.0335	11	-0.10	OK	0
148.99	Total S, Other (0.2%)	0572	0.3229	0.0297	0.3090	0.1870	0.0335	11	0.07	OK	0
148.99	Total S, Other (0.2%)	0619	0.3270	0.0260	0.3090	0.1870	0.0335	11	0.10	OK	0
148.99	Total S, Other (0.2%)	0220	0.3900	0.0400	0.3090	0.1870	0.0335	11	0.43	OK	0
148.99	Total S, Other (0.2%)	0422	0.6870	0.0690	0.3090	0.1870	0.0335	11	2.02	High	0
148.99	Total S, Other (0.2%)	0523	1.000	0.0800	0.3090	0.1870	0.0335	11	3.70	High	0
148.99	Total S, Other (0.2%)	0377	1.255	0.2300	0.3090	0.1870	0.0335	11	5.06	High	1
149.04	S - HNO3 soluble, ICP (%)	0231	0.2000	0.0000				2			0
149.04	S - HNO3 soluble, ICP (%)	0524	0.2544	0.0015				2			0
151.30	Acid Soluble As, ICP (ppm)	0605	0.4800	0.0000	1.073	0.5741	0.0000	3	-1.03		0
151.30	Acid Soluble As, ICP (ppm)	0524	1.113	0.0127	1.073	0.5741	0.0000	3	0.07		0
151.30	Acid Soluble As, ICP (ppm)	0523	1.626	0.1120	1.073	0.5741	0.0000	3	0.96		0
151.30	Acid Soluble As, ICP (ppm)	0255	0.0000	0.0000	1.073	0.5741	0.0000	3			4
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	0220	0.2000	0.0000				1			0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0527	1.727	0.0550	30.66	28.26	5.879	4	-0.87		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0624	12.88	1.350	30.66	28.26	5.879	4	-0.53		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0515	45.36	21.51	30.66	28.26	5.879	4	0.44		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0494	62.70	0.6000	30.66	28.26	5.879	4	0.96		0
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0136	< 1		30.66	28.26	5.879	4			5
151.33	Acid Soluble As, ICP, 2017.02 (ppm)	0009	< 5		30.66	28.26	5.879	4			5
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0515	< 0.186					0			5
151.34	Acid Soluble As, ICP, EPA 3050B/6010C (ppm)	0368	< 0.3					0			5

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			Value	Range	Rob Mean	Rob SD	Rob R-bar				
151.99	Acid Soluble As, Other (ppm)	0220	0.2000	0.0000	1.017	0.7589	0.0000	3	-1.08		0
151.99	Acid Soluble As, Other (ppm)	0572	1.150	0.0153	1.017	0.7589	0.0000	3	0.18		0
151.99	Acid Soluble As, Other (ppm)	0009	1.700	0.0000	1.017	0.7589	0.0000	3	0.90		0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0354	0.0100	0.0000	0.0138	0.0065	0.0000	3	-0.58		0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0494	0.0100	0.0002	0.0138	0.0065	0.0000	3	-0.58		0
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0422	0.0213	0.0008	0.0138	0.0065	0.0000	3	1.15		0
165.99	Acid Soluble B, Other (%)	0009	0.0083	0.0004	0.0331	0.0334	0.0097	6	-0.66	Low	0
165.99	Acid Soluble B, Other (%)	0527	0.0110	0.0001	0.0331	0.0334	0.0097	6	-0.59	Low	0
165.99	Acid Soluble B, Other (%)	0524	0.0144	0.0003	0.0331	0.0334	0.0097	6	-0.50	Low	0
165.99	Acid Soluble B, Other (%)	0472	0.0300	0.0200	0.0331	0.0334	0.0097	6	-0.08	OK	0
165.99	Acid Soluble B, Other (%)	0624	0.0520	0.0040	0.0331	0.0334	0.0097	6	0.50	High	0
165.99	Acid Soluble B, Other (%)	0552	0.3600	0.0600	0.0331	0.0334	0.0097	6	8.72	High	0
165.99	Acid Soluble B, Other (%)	0515	2.339	1.421	0.0331	0.0334	0.0097	6	61.47	High	1
165.99	Acid Soluble B, Other (%)	0572	< 0.0108		0.0331	0.0334	0.0097	6			5
181.30	Acid Soluble Cd, ICP (ppm)	0523	0.0560	0.0100	3.329	4.797	0.0000	4	-0.68		0
181.30	Acid Soluble Cd, ICP (ppm)	0394	0.2755	0.0090	3.329	4.797	0.0000	4	-0.64		0
181.30	Acid Soluble Cd, ICP (ppm)	0524	2.685	0.0168	3.329	4.797	0.0000	4	-0.13		0
181.30	Acid Soluble Cd, ICP (ppm)	0605	10.30	0.0000	3.329	4.797	0.0000	4	1.45		0
181.30	Acid Soluble Cd, ICP (ppm)	0255	1.232	2.464	3.329	4.797	0.0000	4			4
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0086	0.1739	0.0065	5.463	7.925	0.3562	3	-0.54		0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0494	1.640	0.0600	5.463	7.925	0.3562	3	-0.39		0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0624	14.57	1.002	5.463	7.925	0.3562	3	0.93		0
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0527	< 0.0001		5.463	7.925	0.3562	3			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0515	< 0.19		5.463	7.925	0.3562	3			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0136	< 1		5.463	7.925	0.3562	3			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0009	< 2		5.463	7.925	0.3562	3			5
181.33	Acid Soluble Cd, ICP, 2017.02 (ppm)	0117	< 5		5.463	7.925	0.3562	3			5
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	0368	6.200	0.4000				1			0
181.34	Acid Soluble Cd, ICP, EPA 3050B/6010C (ppm)	0515	< 0.133					1			5
181.99	Acid Soluble Cd, Other (ppm)	0220	0.0300	0.0000				2			0
181.99	Acid Soluble Cd, Other (ppm)	0572	0.0835	0.0242				2			0
181.99	Acid Soluble Cd, Other (ppm)	0009	< 0.13					2			5
190.00	Water Soluble Cl, Titrimetric (%)	0553	< 0.1					0			5
191.30	Acid Soluble Cr, ICP (ppm)	0035	833.5	119.0	1,243	395.1	54.65	5	-1.04		0
191.30	Acid Soluble Cr, ICP (ppm)	0394	910.6	41.59	1,243	395.1	54.65	5	-0.84		0
191.30	Acid Soluble Cr, ICP (ppm)	0605	1,165	42.70	1,243	395.1	54.65	5	-0.20		0
191.30	Acid Soluble Cr, ICP (ppm)	0523	1,608	41.68	1,243	395.1	54.65	5	0.92		0
191.30	Acid Soluble Cr, ICP (ppm)	0524	1,698	28.28	1,243	395.1	54.65	5	1.15		0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0624	981.4	38.86	1,408	303.5	45.06	8	-1.29	NA	0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0086	1,184	52.70	1,408	303.5	45.06	8	-0.68	NA	0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0494	1,288	43.00	1,408	303.5	45.06	8	-0.36	NA	0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0136	1,361	30.00	1,408	303.5	45.06	8	-0.14	NA	0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0009	1,500	0.0000	1,408	303.5	45.06	8	0.28	NA	0

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191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0117	1,517	17.31	1,408	303.5	45.06	8	0.33	NA	0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0527	1,577	57.54	1,408	303.5	45.06	8	0.51	NA	0
191.33	Acid Soluble Cr, ICP, 2017.02 (ppm)	0515	1,859	76.00	1,408	303.5	45.06	8	1.36	NA	0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0368	1,435	30.00				2			0
191.34	Acid Soluble Cr, ICP, EPA 3050B/6010C (ppm)	0515	1,603	64.00				2			0
191.99	Acid Soluble Cr, Other (ppm)	0572	1,183	28.49				2			0
191.99	Acid Soluble Cr, Other (ppm)	0009	1,550	100.0				2			0
202.30	Acid Soluble Co, ICP (ppm)	0035	38.50	3.000	55.90	12.65	0.0000	4	-1.37		0
202.30	Acid Soluble Co, ICP (ppm)	0524	55.13	0.9755	55.90	12.65	0.0000	4	-0.06		0
202.30	Acid Soluble Co, ICP (ppm)	0605	62.53	0.0000	55.90	12.65	0.0000	4	0.52		0
202.30	Acid Soluble Co, ICP (ppm)	0523	67.43	0.4170	55.90	12.65	0.0000	4	0.91		0
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0220	18.90	0.4000				1			0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0136	18.99	0.7800	50.68	5.021	4.936	7	-5.71	Low	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0527	47.48	0.1526	50.68	5.021	4.936	7	-0.58	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0494	48.75	1.700	50.68	5.021	4.936	7	-0.35	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0515	52.36	12.15	50.68	5.021	4.936	7	0.30	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0009	53.00	2.000	50.68	5.021	4.936	7	0.42	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0117	54.29	2.351	50.68	5.021	4.936	7	0.65	OK	0
202.33	Acid Soluble Co, ICP, 2017.02 (ppm)	0086	55.75	19.80	50.68	5.021	4.936	7	0.91	OK	0
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0368	18.60	0.8000				2			0
202.34	Acid Soluble Co, ICP, EPA 3050B/6010C (ppm)	0515	27.87	6.260				2			0
202.99	Acid Soluble Co, Other (ppm)	0572	11.87	2.738	35.29	21.80	2.246	3	-1.07		0
202.99	Acid Soluble Co, Other (ppm)	0220	39.00	2.000	35.29	21.80	2.246	3	0.17		0
202.99	Acid Soluble Co, Other (ppm)	0009	55.00	2.000	35.29	21.80	2.246	3	0.90		0
202.99	Acid Soluble Co, Other (ppm)	0255	0.0000	0.0000	35.29	21.80	2.246	3			4
221.00	Acid Soluble Cu, AA, inorganic 965.09 (0.003%)	0485	0.0022	0.0001				1			0
221.00	Acid Soluble Cu, AA, inorganic 965.09 (0.003%)	0553	< 0.005					1			5
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0234	0.0005	0.0000	0.0032	0.0028	0.0000	9	-0.98	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0360	0.0007	0.0009	0.0032	0.0028	0.0000	9	-0.92	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0035	0.0011	0.0000	0.0032	0.0028	0.0000	9	-0.76	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0377	0.0019	0.0001	0.0032	0.0028	0.0000	9	-0.49	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0619	0.0032	0.0000	0.0032	0.0028	0.0000	9	-0.01	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0422	0.0035	0.0000	0.0032	0.0028	0.0000	9	0.10	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0049	0.0048	0.0058	0.0032	0.0028	0.0000	9	0.57	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0452	0.0060	0.0000	0.0032	0.0028	0.0000	9	1.00	OK	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0291	0.0200	0.0000	0.0032	0.0028	0.0000	9	6.04	High	0
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0552	0.2200	0.0200	0.0032	0.0028	0.0000	9	77.98	High	1
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0255	0.0000	0.0000	0.0032	0.0028	0.0000	9			4
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (0.003%)	0354	< 0.01		0.0032	0.0028	0.0000	9			5
221.31	Acid Soluble Cu, ICP, test portion organic 965.09 (0.003%)	0444	0.0030	0.0000				1			0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (0.003%)	0220	0.0018	0.0001				2			0
221.32	Acid Soluble Cu, ICP, test portion 2006.03A-C (0.003%)	0292	0.0100	0.0000				2			0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0543	0.0010	0.0000	0.0022	0.0010	0.0000	8	-1.25	OK	0

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221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0609	0.0014	0.0000	0.0022	0.0010	0.0000	8	-0.83	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0106	0.0019	0.0001	0.0022	0.0010	0.0000	8	-0.36	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0521	0.0020	0.0000	0.0022	0.0010	0.0000	8	-0.21	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0086	0.0022	0.0002	0.0022	0.0010	0.0000	8	0.00	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0527	0.0026	0.0001	0.0022	0.0010	0.0000	8	0.37	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0624	0.0030	0.0001	0.0022	0.0010	0.0000	8	0.79	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0515	0.0053	0.0005	0.0022	0.0010	0.0000	8	3.19	OK	0
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0055	0.0035	0.0030	0.0022	0.0010	0.0000	8	1.36	OK	1
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0394	< 0.001		0.0022	0.0010	0.0000	8			5
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0009	< 0.0025		0.0022	0.0010	0.0000	8			5
221.33	Acid Soluble Cu, ICP, 2017.02 (0.003%)	0117	< 5		0.0022	0.0010	0.0000	8			5
221.99	Acid Soluble Cu, Other (0.003%)	0368	0.0004	0.0002	0.0026	0.0014	0.0004	12	-1.52	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0389	0.0010	0.0000	0.0026	0.0014	0.0004	12	-1.10	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0523	0.0010	0.0000	0.0026	0.0014	0.0004	12	-1.10	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0572	0.0021	0.0003	0.0026	0.0014	0.0004	12	-0.37	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0042	0.0023	0.0001	0.0026	0.0014	0.0004	12	-0.23	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0515	0.0028	0.0008	0.0026	0.0014	0.0004	12	0.16	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0524	0.0028	0.0006	0.0026	0.0014	0.0004	12	0.16	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0619	0.0032	0.0000	0.0026	0.0014	0.0004	12	0.43	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0559	0.0035	0.0002	0.0026	0.0014	0.0004	12	0.64	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0562	0.0037	0.0002	0.0026	0.0014	0.0004	12	0.78	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0600	0.0037	0.0002	0.0026	0.0014	0.0004	12	0.78	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0605	0.0045	0.0010	0.0026	0.0014	0.0004	12	1.34	OK	0
221.99	Acid Soluble Cu, Other (0.003%)	0009	< 0.002		0.0026	0.0014	0.0004	12			5
221.99	Acid Soluble Cu, Other (0.003%)	0587	< 0.02		0.0026	0.0014	0.0004	12			5
241.00	Acid Soluble Fe, AA, inorganic 965.09 (15.6%)	0485	13.06	1.000	14.08	0.9744	0.0000	3	-1.05		0
241.00	Acid Soluble Fe, AA, inorganic 965.09 (15.6%)	0040	14.19	0.7200	14.08	0.9744	0.0000	3	0.11		0
241.00	Acid Soluble Fe, AA, inorganic 965.09 (15.6%)	0553	15.00	0.0000	14.08	0.9744	0.0000	3	0.94		0
241.01	Acid Soluble Fe, AA, organic 965.09 (15.6%)	0580	12.54	0.0700				1			0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0619	10.55	0.1000	14.35	1.547	0.2961	17	-2.45	Low	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0231	12.96	0.0900	14.35	1.547	0.2961	17	-0.90	Low	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0324	13.05	1.100	14.35	1.547	0.2961	17	-0.84	Low	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0035	13.15	0.5000	14.35	1.547	0.2961	17	-0.77	Low	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0552	13.21	0.4700	14.35	1.547	0.2961	17	-0.74	Low	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0255	13.28	0.4500	14.35	1.547	0.2961	17	-0.69	Low	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0234	13.67	0.1500	14.35	1.547	0.2961	17	-0.44	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0377	13.79	1.280	14.35	1.547	0.2961	17	-0.36	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0023	13.96	0.0910	14.35	1.547	0.2961	17	-0.25	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0291	14.55	0.0700	14.35	1.547	0.2961	17	0.13	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0360	15.14	0.2200	14.35	1.547	0.2961	17	0.51	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0354	15.20	0.2000	14.35	1.547	0.2961	17	0.55	OK	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0451	15.42	0.0300	14.35	1.547	0.2961	17	0.69	High	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0452	15.47	0.0300	14.35	1.547	0.2961	17	0.72	High	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0433	16.18	0.2900	14.35	1.547	0.2961	17	1.18	High	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0049	16.21	0.1700	14.35	1.547	0.2961	17	1.20	High	0
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (15.6%)	0422	18.02	1.340	14.35	1.547	0.2961	17	2.37	High	0
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (15.6%)	0220	13.72	0.8300				2			0
241.32	Acid Soluble Fe, ICP, test portion 2006.03A-C (15.6%)	0292	15.16	0.0900				2			0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0624	5.330	0.0150	14.42	1.284	0.4126	17	-7.08	Low	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0055	12.63	0.1500	14.42	1.284	0.4126	17	-1.40	Low	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0472	13.32	0.0100	14.42	1.284	0.4126	17	-0.86	Low	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0177	13.46	0.1687	14.42	1.284	0.4126	17	-0.75	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0009	13.50	1.000	14.42	1.284	0.4126	17	-0.72	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0043	13.63	0.5700	14.42	1.284	0.4126	17	-0.62	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0233	14.35	1.740	14.42	1.284	0.4126	17	-0.06	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0394	14.35	0.0410	14.42	1.284	0.4126	17	-0.06	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0086	14.49	1.051	14.42	1.284	0.4126	17	0.05	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0136	14.68	0.0900	14.42	1.284	0.4126	17	0.20	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0527	14.74	0.0756	14.42	1.284	0.4126	17	0.25	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0609	15.00	0.8000	14.42	1.284	0.4126	17	0.45	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0106	15.03	0.0379	14.42	1.284	0.4126	17	0.47	OK	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0102	15.51	0.0500	14.42	1.284	0.4126	17	0.84	High	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0494	15.59	0.4737	14.42	1.284	0.4126	17	0.91	High	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0543	16.09	1.079	14.42	1.284	0.4126	17	1.30	High	0
241.33	Acid Soluble Fe, ICP, 2017.02 (15.6%)	0515	17.56	0.2500	14.42	1.284	0.4126	17	2.44	High	0
241.99	Acid Soluble Fe, Other (15.6%)	0619	10.55	0.1000	15.07	1.327	0.3905	15	-3.40	Low	0
241.99	Acid Soluble Fe, Other (15.6%)	0042	12.85	2.630	15.07	1.327	0.3905	15	-1.67	Low	0
241.99	Acid Soluble Fe, Other (15.6%)	0389	13.81	0.0600	15.07	1.327	0.3905	15	-0.95	Low	0
241.99	Acid Soluble Fe, Other (15.6%)	0027	14.24	0.8600	15.07	1.327	0.3905	15	-0.62	OK	0
241.99	Acid Soluble Fe, Other (15.6%)	0605	14.57	0.5300	15.07	1.327	0.3905	15	-0.38	OK	0
241.99	Acid Soluble Fe, Other (15.6%)	0559	14.87	0.0100	15.07	1.327	0.3905	15	-0.15	OK	0
241.99	Acid Soluble Fe, Other (15.6%)	0587	15.03	0.6500	15.07	1.327	0.3905	15	-0.03	OK	0
241.99	Acid Soluble Fe, Other (15.6%)	0572	15.11	0.3684	15.07	1.327	0.3905	15	0.03	OK	0
241.99	Acid Soluble Fe, Other (15.6%)	0368	15.14	0.2593	15.07	1.327	0.3905	15	0.06	OK	0
241.99	Acid Soluble Fe, Other (15.6%)	0515	15.41	0.1700	15.07	1.327	0.3905	15	0.25	OK	0
241.99	Acid Soluble Fe, Other (15.6%)	0584	15.90	0.2000	15.07	1.327	0.3905	15	0.63	OK	0
241.99	Acid Soluble Fe, Other (15.6%)	0562	16.20	0.2000	15.07	1.327	0.3905	15	0.85	High	0
241.99	Acid Soluble Fe, Other (15.6%)	0600	16.20	0.2000	15.07	1.327	0.3905	15	0.85	High	0
241.99	Acid Soluble Fe, Other (15.6%)	0524	16.69	0.3937	15.07	1.327	0.3905	15	1.22	High	0
241.99	Acid Soluble Fe, Other (15.6%)	0523	16.70	2.554	15.07	1.327	0.3905	15	1.23	High	0
251.30	Acid Soluble Pb, ICP (ppm)	0523	1.847	0.0740	7.621	7.586	0.0000	4	-0.76		0
251.30	Acid Soluble Pb, ICP (ppm)	0524	3.856	0.0876	7.621	7.586	0.0000	4	-0.50		0
251.30	Acid Soluble Pb, ICP (ppm)	0605	6.080	0.0000	7.621	7.586	0.0000	4	-0.20		0
251.30	Acid Soluble Pb, ICP (ppm)	0035	18.70	3.000	7.621	7.586	0.0000	4	1.46		0
251.30	Acid Soluble Pb, ICP (ppm)	0255	0.0000	0.0000	7.621	7.586	0.0000	4			4
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	0220	17.65	0.3000				1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0527	2.568	0.0616	16.46	14.63	1.799	4	-0.81		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0086	9.874	0.6656	16.46	14.63	1.799	4	-0.38		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0494	16.80	0.6000	16.46	14.63	1.799	4	0.02		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0515	36.61	5.870	16.46	14.63	1.799	4	1.17		0
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0136	< 3		16.46	14.63	1.799	4			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0117	< 5		16.46	14.63	1.799	4			5
251.33	Acid Soluble Pb, ICP, 2017.02 (ppm)	0009	< 6		16.46	14.63	1.799	4			5
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0515	17.54	9.350				2			0
251.34	Acid Soluble Pb, ICP, EPA 3050B/6010C (ppm)	0368	246.5	3.000				2			0
251.99	Acid Soluble Pb, Other (ppm)	0572	2.780	1.573				2			0
251.99	Acid Soluble Pb, Other (ppm)	0220	17.45	0.1000				2			0
251.99	Acid Soluble Pb, Other (ppm)	0009	< 2.5					2			5
261.00	Acid Soluble Mn, AA, Mn2+ only (2.3%)	0553	1.980	0.0400				1			0
261.12	Acid Soluble Mn, AA, inorganic 965.09 (2.3%)	0485	1.400	0.0400	1.591	0.1763	0.0530	3	-1.08		0
261.12	Acid Soluble Mn, AA, inorganic 965.09 (2.3%)	0040	1.626	0.0560	1.591	0.1763	0.0530	3	0.20		0
261.12	Acid Soluble Mn, AA, inorganic 965.09 (2.3%)	0029	1.748	0.0630	1.591	0.1763	0.0530	3	0.89		0
261.13	Acid Soluble Mn, AA, organic 965.09 (2.3%)	0580	1.570	0.0400				1			0
261.14	Acid Soluble Mn, AA, 965.09, test portion 2006.03A-C (2.3%)	0292	1.600	0.0000				1			0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (2.3%)	0234	1.385	0.1500	1.652	0.1864	0.0341	7	-1.30	Low	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (2.3%)	0291	1.575	0.0100	1.652	0.1864	0.0341	7	-0.37	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (2.3%)	0035	1.595	0.0500	1.652	0.1864	0.0341	7	-0.28	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (2.3%)	0354	1.620	0.0600	1.652	0.1864	0.0341	7	-0.16	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (2.3%)	0433	1.687	0.0140	1.652	0.1864	0.0341	7	0.17	OK	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (2.3%)	0422	1.848	0.0050	1.652	0.1864	0.0341	7	0.95	High	0
261.30	Acid Soluble Mn, ICP, test portion 972.02a (2.3%)	0452	1.855	0.0100	1.652	0.1864	0.0341	7	0.98	High	0
261.31	Acid Soluble Mn, ICP, test portion 972.02b (2.3%)	0360	1.505	0.0300				2			0
261.31	Acid Soluble Mn, ICP, test portion 972.02b (2.3%)	0324	1.565	0.0900				2			0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (2.3%)	0619	1.275	0.0900	1.666	0.2811	0.0420	7	-1.26	Low	0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (2.3%)	0220	1.520	0.0200	1.666	0.2811	0.0420	7	-0.47	OK	0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (2.3%)	0231	1.630	0.0000	1.666	0.2811	0.0420	7	-0.12	OK	0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (2.3%)	0023	1.644	0.0100	1.666	0.2811	0.0420	7	-0.07	OK	0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (2.3%)	0377	1.750	0.0600	1.666	0.2811	0.0420	7	0.27	OK	0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (2.3%)	0552	1.755	0.0300	1.666	0.2811	0.0420	7	0.29	OK	0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (2.3%)	0451	2.190	0.0420	1.666	0.2811	0.0420	7	1.69	High	0
261.32	Acid Soluble Mn, ICP, test portion inorganic 965.09 (2.3%)	0049	1.586	0.2400	1.666	0.2811	0.0420	7	-0.26	OK	1
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0394	1.381	0.0030	1.546	0.1176	0.0459	16	-1.41	Low	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0494	1.401	0.1540	1.546	0.1176	0.0459	16	-1.24	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0086	1.406	0.0262	1.546	0.1176	0.0459	16	-1.19	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0043	1.424	0.0090	1.546	0.1176	0.0459	16	-1.04	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0009	1.500	0.0000	1.546	0.1176	0.0459	16	-0.39	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0055	1.505	0.0300	1.546	0.1176	0.0459	16	-0.35	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0106	1.528	0.0316	1.546	0.1176	0.0459	16	-0.16	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0177	1.536	0.0433	1.546	0.1176	0.0459	16	-0.09	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0472	1.565	0.0100	1.546	0.1176	0.0459	16	0.16	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0233	1.610	0.0840	1.546	0.1176	0.0459	16	0.54	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0624	1.614	0.0070	1.546	0.1176	0.0459	16	0.57	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0136	1.620	0.0000	1.546	0.1176	0.0459	16	0.63	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0543	1.636	0.1100	1.546	0.1176	0.0459	16	0.76	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0527	1.643	0.0306	1.546	0.1176	0.0459	16	0.82	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0609	1.650	0.0200	1.546	0.1176	0.0459	16	0.88	OK	0
261.35	Acid Soluble Mn, ICP, 2017.02 (2.3%)	0515	2.174	0.1640	1.546	0.1176	0.0459	16	5.34	High	0
261.99	Acid Soluble Mn, Other (2.3%)	0619	1.275	0.0900	1.678	0.2396	0.0572	14	-1.68	Low	0
261.99	Acid Soluble Mn, Other (2.3%)	0042	1.460	0.2400	1.678	0.2396	0.0572	14	-0.91	Low	0
261.99	Acid Soluble Mn, Other (2.3%)	0605	1.555	0.1100	1.678	0.2396	0.0572	14	-0.51	OK	0
261.99	Acid Soluble Mn, Other (2.3%)	0255	1.559	0.0110	1.678	0.2396	0.0572	14	-0.50	OK	0
261.99	Acid Soluble Mn, Other (2.3%)	0389	1.560	0.0000	1.678	0.2396	0.0572	14	-0.49	OK	0
261.99	Acid Soluble Mn, Other (2.3%)	0368	1.568	0.0271	1.678	0.2396	0.0572	14	-0.46	OK	0
261.99	Acid Soluble Mn, Other (2.3%)	0587	1.625	0.0300	1.678	0.2396	0.0572	14	-0.22	OK	0
261.99	Acid Soluble Mn, Other (2.3%)	0562	1.650	0.1000	1.678	0.2396	0.0572	14	-0.12	OK	0
261.99	Acid Soluble Mn, Other (2.3%)	0600	1.650	0.1000	1.678	0.2396	0.0572	14	-0.12	OK	0
261.99	Acid Soluble Mn, Other (2.3%)	0572	1.719	0.0418	1.678	0.2396	0.0572	14	0.17	OK	0
261.99	Acid Soluble Mn, Other (2.3%)	0524	1.834	0.0473	1.678	0.2396	0.0572	14	0.65	OK	0
261.99	Acid Soluble Mn, Other (2.3%)	0523	1.922	0.0210	1.678	0.2396	0.0572	14	1.02	High	0
261.99	Acid Soluble Mn, Other (2.3%)	0559	2.070	0.0200	1.678	0.2396	0.0572	14	1.64	High	0
261.99	Acid Soluble Mn, Other (2.3%)	0515	2.298	0.0170	1.678	0.2396	0.0572	14	2.59	High	0
261.99	Acid Soluble Mn, Other (2.3%)	0027	77.29	151.4	1.678	0.2396	0.0572	14	315.61	High	1
281.30	Acid Soluble Hg, ICP (ppm)	0605	0.0100	0.0000				1			0
281.30	Acid Soluble Hg, ICP (ppm)	0527	< 0.001					1			5
281.30	Acid Soluble Hg, ICP (ppm)	0515	< 0.1					1			5
281.99	Acid Soluble Hg, Other (ppm)	0524	0.0028	0.0021				2			0
281.99	Acid Soluble Hg, Other (ppm)	0572	0.0179	0.0145				2			0
281.99	Acid Soluble Hg, Other (ppm)	0009	< 0.044					2			5
289.30	Acid Soluble Mo, ICP (ppm)	0255	14.09	0.4700	28.12	17.17	0.0000	3	-0.82		0
289.30	Acid Soluble Mo, ICP (ppm)	0234	23.00	0.0000	28.12	17.17	0.0000	3	-0.30		0
289.30	Acid Soluble Mo, ICP (ppm)	0524	47.27	0.4551	28.12	17.17	0.0000	3	1.12		0
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	0220	26.85	0.3000				1			0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0086	14.21	19.15	33.23	17.65	9.225	7	-0.97	Low	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0136	21.70	0.3400	33.23	17.65	9.225	7	-0.59	Low	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0117	25.10	3.210	33.23	17.65	9.225	7	-0.42	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0527	31.79	0.0986	33.23	17.65	9.225	7	-0.07	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0515	33.13	9.680	33.23	17.65	9.225	7	-0.01	OK	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0106	47.00	24.00	33.23	17.65	9.225	7	0.71	High	0
289.33	Acid Soluble Mo, ICP, 2017.02 (ppm)	0494	65.75	8.100	33.23	17.65	9.225	7	1.67	High	0
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	0368	16.40	0.2000				2			0
289.34	Acid Soluble Mo, ICP, EPA 3050B/6010C (ppm)	0515	17.59	1.990				2			0
289.99	Acid Soluble Mo, Other (ppm)	0572	27.93	3.350				1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
291.30	Acid Soluble Ni, ICP (ppm)	0035	53.20	12.40	140.2	119.4	4.925	4	-0.73		0
291.30	Acid Soluble Ni, ICP (ppm)	0394	58.38	4.847	140.2	119.4	4.925	4	-0.68		0
291.30	Acid Soluble Ni, ICP (ppm)	0523	140.1	0.8520	140.2	119.4	4.925	4	0.00		0
291.30	Acid Soluble Ni, ICP (ppm)	0524	309.1	1.601	140.2	119.4	4.925	4	1.41		0
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	0220	123.0	4.000				1			0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0624	77.65	3.240	116.7	29.19	4.991	7	-1.21	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0136	94.28	7.180	116.7	29.19	4.991	7	-0.69	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0086	114.7	0.0615	116.7	29.19	4.991	7	-0.06	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0515	117.8	7.800	116.7	29.19	4.991	7	0.04	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0117	120.6	3.909	116.7	29.19	4.991	7	0.12	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0009	135.0	10.00	116.7	29.19	4.991	7	0.57	NA	0
291.33	Acid Soluble Ni, ICP, 2017.02 (ppm)	0527	156.6	2.746	116.7	29.19	4.991	7	1.24	NA	0
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0368	72.75	13.50				2			0
291.34	Acid Soluble Ni, ICP, EPA 3050B/6010C (ppm)	0515	96.06	8.280				2			0
291.99	Acid Soluble Ni, Other (ppm)	0572	87.93	20.47	113.2	22.68	14.26	4	-1.11		0
291.99	Acid Soluble Ni, Other (ppm)	0255	100.4	3.580	113.2	22.68	14.26	4	-0.56		0
291.99	Acid Soluble Ni, Other (ppm)	0220	129.5	23.00	113.2	22.68	14.26	4	0.72		0
291.99	Acid Soluble Ni, Other (ppm)	0009	135.0	10.00	113.2	22.68	14.26	4	0.96		0
301.30	Acid Soluble Se, ICP (ppm)	0524	1.924	0.1143	3.521	1.418	0.0000	3	-1.13		0
301.30	Acid Soluble Se, ICP (ppm)	0523	4.010	0.0770	3.521	1.418	0.0000	3	0.34		0
301.30	Acid Soluble Se, ICP (ppm)	0605	4.630	0.0000	3.521	1.418	0.0000	3	0.78		0
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	0220	5.300	0.4000				1			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0515	70.77	29.77				1			0
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0527	< 0.01					1			5
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0117	< 5					1			5
301.33	Acid Soluble Se, ICP, 2017.02 (ppm)	0009	< 22					1			5
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0515	4.726	0.2600				1			0
301.34	Acid Soluble Se, ICP, EPA 3050B/6010C (ppm)	0368	< 1					1			5
301.99	Acid Soluble Se, Other (ppm)	0009	4.400	0.6000	4.994	1.001	0.4176	3	-0.59		0
301.99	Acid Soluble Se, Other (ppm)	0572	4.433	0.5529	4.994	1.001	0.4176	3	-0.56		0
301.99	Acid Soluble Se, Other (ppm)	0220	6.150	0.1000	4.994	1.001	0.4176	3	1.15		0
301.99	Acid Soluble Se, Other (ppm)	0255	0.0000	0.0000	4.994	1.001	0.4176	3			4
311.00	Sodium, AA (%)	0553	0.0990	0.0060				1			0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0494	0.0925	0.0026	0.1018	0.0081	0.0000	6	-1.02	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0624	0.0948	0.0077	0.1018	0.0081	0.0000	6	-0.77	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0452	0.1000	0.0000	0.1018	0.0081	0.0000	6	-0.19	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0035	0.1065	0.0010	0.1018	0.0081	0.0000	6	0.52	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0527	0.1068	0.0009	0.1018	0.0081	0.0000	6	0.55	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (%)	0009	0.1100	0.0000	0.1018	0.0081	0.0000	6	0.91	OK	0
311.99	Sodium, Other (%)	0572	0.0772	0.0059				2			0
311.99	Sodium, Other (%)	0354	0.1050	0.0100				2			0
321.00	Acid Soluble Zn, AA, inorganic 965.09 (%)	0553	0.0096	0.0002				1			0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0255	0.0040	0.0000	0.0084	0.0029	0.0000	6	-1.33	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0035	0.0064	0.0001	0.0084	0.0029	0.0000	6	-0.61	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0452	0.0097	0.0001	0.0084	0.0029	0.0000	6	0.40	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0049	0.0100	0.0000	0.0084	0.0029	0.0000	6	0.50	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0354	0.0100	0.0000	0.0084	0.0029	0.0000	6	0.50	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0422	0.0101	0.0012	0.0084	0.0029	0.0000	6	0.53	OK	0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0552	0.4350	0.2100	0.0084	0.0029	0.0000	6	130.21	High	1
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0220	0.0076	0.0001				2			0
321.32	Acid Soluble Zn, ICP, test portion 2006.03A-C (%)	0394	0.0088	0.0007				2			0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0106	0.0061	0.0009	0.0087	0.0020	0.0004	9	-1.23	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0494	0.0068	0.0001	0.0087	0.0020	0.0004	9	-0.90	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0515	0.0073	0.0011	0.0087	0.0020	0.0004	9	-0.66	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0527	0.0084	0.0001	0.0087	0.0020	0.0004	9	-0.14	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0086	0.0089	0.0001	0.0087	0.0020	0.0004	9	0.09	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0609	0.0093	0.0005	0.0087	0.0020	0.0004	9	0.28	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0136	0.0100	0.0000	0.0087	0.0020	0.0004	9	0.64	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0472	0.0100	0.0000	0.0087	0.0020	0.0004	9	0.64	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0117	0.0114	0.0003	0.0087	0.0020	0.0004	9	1.28	OK	0
321.33	Acid Soluble Zn, ICP, 2017.02 (%)	0624	0.0108	0.0027	0.0087	0.0020	0.0004	9	0.99	OK	1
321.99	Acid Soluble Zn, Other (%)	0368	0.0066	0.0001	0.0079	0.0017	0.0007	7	-0.71	OK	0
321.99	Acid Soluble Zn, Other (%)	0220	0.0067	0.0003	0.0079	0.0017	0.0007	7	-0.66	OK	0
321.99	Acid Soluble Zn, Other (%)	0572	0.0071	0.0011	0.0079	0.0017	0.0007	7	-0.44	OK	0
321.99	Acid Soluble Zn, Other (%)	0515	0.0075	0.0013	0.0079	0.0017	0.0007	7	-0.22	OK	0
321.99	Acid Soluble Zn, Other (%)	0027	0.0075	0.0010	0.0079	0.0017	0.0007	7	-0.19	OK	0
321.99	Acid Soluble Zn, Other (%)	0524	0.0095	0.0005	0.0079	0.0017	0.0007	7	0.87	OK	0
321.99	Acid Soluble Zn, Other (%)	0523	0.0170	0.0000	0.0079	0.0017	0.0007	7	4.99	High	0
431.10	Soluble Si in nonliquids, Na2CO3-NH4NO3 extraction, spectro	0220	0.5000	0.0000				2			0
431.10	Soluble Si in nonliquids, Na2CO3-NH4NO3 extraction, spectro	0136	0.6500	0.0000				2			0
431.99	Soluble Si in nonliquids, Other (4%)	0624	3.392	0.0000				2			0
431.99	Soluble Si in nonliquids, Other (4%)	0452	3.745	0.0100				2			0

Interpreting Z Scores and Flags:

Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or -2 and -3 (warning) and Green = Z < 2 and >-2 (OK at 95%). Flags indicate data usage: 0 = Used, 1 = rejected for duplicates too far apart, 2 = rejected as extreme outlier, 3 = removed from stats, 4 = rejected due to 0s submitted and 5 = LOD. A 9 flag indicates a data problem - scores not calculated.

Notes:

Robust statistics not used if < 6 labs used in calculations, in this case Values and Z Scores are grayed out and should be interpreted with extreme caution. IA Status describes where your result is relative to the Assigned Value $\pm$ IA. Red indicates Higher or Lower and Green indicates within the IA range about the Robust mean. Method codes in light green indicate a guaranteed analyte. Individual lab values may be below detection limits but are reported solely for the purpose of this Proficiency Testing program.