

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Analyte Proficiency From All Labs

Sample # 150511

Grade 32-0-4

Statistical Summary

Analytes: 32

Labs Reporting: 90

Issue Date : 06/30/2015

Analyte Code	Analyte	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	IA %RSD	Average Range (R-bar)	Horwitz %RSD
001	Ammoniacal Nitrogen (%)	20	20	5.821	0.8692	5.764		0.5444	0.0861	9.44%		0.1001	3.07%
003	Water Insoluble Nitrogen (%)	4	4	3.365	5.393	3.365		5.393	1.907	160.30%		0.3755	3.33%
005	Urea Nitrogen (%)	6	6	15.88	1.736	15.34		0.5660	0.1634	3.69%		0.2133	2.65%
007	Urea (%)	2	2	13.54	3.306								
009	Ammoniacal Plus Nitrate Nitrogen (%)	1		5.925									
010	Total Nitrogen (32%)	80	77	32.40	0.8573	32.34	0.8800	0.4067	0.0328	1.26%	1.36%	0.1745	2.37%
020	Total Phosphorus as P2O5 (%)	5	3	1.430	2.114	1.430		2.114	0.8629	147.81%		0.0667	3.79%
041	Direct Available Phosphorus as P2O5 (%)	4	1	0.4510		1.430	0.6700	2.114	1.495	147.81%	23.43%	0.1360	3.79%
048	Water Soluble Phosphorus as P2O5 (%)	1		0.0500									
050	Soluble Potassium as K2O (4%)	87	84	3.964	0.2662	3.957	0.4100	0.1684	0.0130	4.26%	5.18%	0.0795	3.25%
060	Water (%)	5	5	1.948	1.387	1.948		1.387	0.4387	71.23%		0.0421	3.62%
101	Acid Soluble Calcium (%)	11	10	0.0658	0.0592	0.0418		0.0054	0.0012	12.86%		0.0097	6.45%
121	Acid Soluble Magnesium (%)	15	14	0.0341	0.0058	0.0340		0.0064	0.0012	18.77%		0.0065	6.65%
143	Elemental Sulfur (%)	6	6	7.702	0.3077	7.702		0.3489	0.1007	4.53%		0.1933	2.94%
145	Sulfate Sulfur, HCl soluble (%)	5	5	7.585	0.3295	7.585		0.3295	0.1042	4.34%		0.0876	2.95%
148	Total Sulfur (7%)	46	46	7.604	0.3233	7.625	0.5812	0.2973	0.0310	3.90%	3.81%	0.1327	2.95%
149	Sulfur - HNO3 soluble (%)	1		6.924									
151	Acid Soluble Arsenic (ppm)	9	7	0.7346	0.9906	0.3298		0.1419	0.0379	43.02%		0.0338	18.90%
165	Acid Soluble Boron (%)	2	1	0.0070									
181	Acid Soluble Cadmium (ppm)	7	5	0.4079	0.4394	0.4079		0.4394	0.1389	107.72%		0.0471	18.31%
191	Acid Soluble Chromium (ppm)	14	13	21.80	5.955	21.02		3.940	0.7727	18.74%		1.277	10.11%
202	Acid Soluble Cobalt (ppm)	15	14	2.722	0.9789	2.722		1.110	0.2098	40.78%		0.1396	13.76%
221	Acid Soluble Copper (%)	21	19	1.156	3.505	0.0012		0.0004	0.0001	34.48%		0.0244	10.96%
241	Acid Soluble Iron (2%)	57	56	1.717	0.3977	1.818	0.1868	0.1364	0.0129	7.50%	5.14%	0.0460	3.66%
251	Acid Soluble Lead (ppm)	12	11	2.031	2.518	1.366		1.032	0.2201	75.58%		0.1575	15.26%
261	Acid Soluble Manganese (%)	18	17	0.0111	0.0050	0.0100		0.0007	0.0001	7.26%		0.0004	8.00%
281	Acid Soluble Mercury (ppm)	4	2	0.0636	0.0798	0.0636		0.0798	0.0399	125.52%		0.0204	24.22%
289	Acid Soluble Molybdenum (ppm)	13	12	2.366	0.3360	2.403		0.2624	0.0536	10.92%		0.1583	14.02%
291	Acid Soluble Nickel (ppm)	17	16	9.917	5.511	9.113		1.434	0.2535	15.74%		0.5119	11.47%
301	Acid Soluble Selenium (ppm)	4	3	1.963	2.681	1.963		2.681	1.095	136.62%		0.2593	14.45%
311	Sodium (%)	7	7	0.0629	0.1037	0.0197		0.0088	0.0024	44.75%		0.0064	7.23%

Analyte Code	Analyte	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	IA %RSD	Average Range (R-bar)	Horwitz %RSD
321	Acid Soluble Zinc (%)	20	18	1.493	3.668	0.0012		0.0009	0.0002	79.60%		0.0202	11.05%

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Analyte Proficiency From All Labs

Analytes: 32

Sample # 150511

Lab Values

Labs Reporting: 90

Grade 32-0-4

Issue Date : 06/30/2015

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001	Ammoniacal Nitrogen (%)	0487	3.400	0.0000	5.764	0.5444	0.1001	20	-4.34	001.99	0
001	Ammoniacal Nitrogen (%)	0498	5.050	0.1000	5.764	0.5444	0.1001	20	-1.31	001.10	0
001	Ammoniacal Nitrogen (%)	0368	5.125	0.1700	5.764	0.5444	0.1001	20	-1.17	001.99	0
001	Ammoniacal Nitrogen (%)	0027	5.316	0.2110	5.764	0.5444	0.1001	20	-0.82	001.99	0
001	Ammoniacal Nitrogen (%)	0444	5.455	0.2500	5.764	0.5444	0.1001	20	-0.57	001.10	0
001	Ammoniacal Nitrogen (%)	0230	5.495	0.1300	5.764	0.5444	0.1001	20	-0.49	001.10	0
001	Ammoniacal Nitrogen (%)	0394	5.500	0.2000	5.764	0.5444	0.1001	20	-0.49	001.99	0
001	Ammoniacal Nitrogen (%)	0500	5.515	0.1500	5.764	0.5444	0.1001	20	-0.46	001.10	0
001	Ammoniacal Nitrogen (%)	0096	5.620	0.0000	5.764	0.5444	0.1001	20	-0.27	001.99	0
001	Ammoniacal Nitrogen (%)	0456	5.625	0.0500	5.764	0.5444	0.1001	20	-0.26	001.10	0
001	Ammoniacal Nitrogen (%)	0513	5.725	0.0300	5.764	0.5444	0.1001	20	-0.07	001.99	0
001	Ammoniacal Nitrogen (%)	0481	5.900	0.0400	5.764	0.5444	0.1001	20	0.25	001.10	0
001	Ammoniacal Nitrogen (%)	0397	5.905	0.0100	5.764	0.5444	0.1001	20	0.26	001.99	0
001	Ammoniacal Nitrogen (%)	0389	5.970	0.0000	5.764	0.5444	0.1001	20	0.38	001.10	0
001	Ammoniacal Nitrogen (%)	0506	6.125	0.2900	5.764	0.5444	0.1001	20	0.66	001.99	0
001	Ammoniacal Nitrogen (%)	0510	6.545	0.0100	5.764	0.5444	0.1001	20	1.43	001.99	0
001	Ammoniacal Nitrogen (%)	0405	6.875	0.0700	5.764	0.5444	0.1001	20	2.04	001.10	0
001	Ammoniacal Nitrogen (%)	0489	6.965	0.0300	5.764	0.5444	0.1001	20	2.21	001.99	0
001	Ammoniacal Nitrogen (%)	0220	7.025	0.1100	5.764	0.5444	0.1001	20	2.32	001.99	0
001	Ammoniacal Nitrogen (%)	0415	7.275	0.1500	5.764	0.5444	0.1001	20	2.77	001.99	0
003	Water Insoluble Nitrogen (%)	0220	0.4350	0.0100	3.365	5.393	0.3755	4	-0.54	003.10	0
003	Water Insoluble Nitrogen (%)	0494	0.7030	0.3540	3.365	5.393	0.3755	4	-0.49	003.10	0
003	Water Insoluble Nitrogen (%)	0029	0.8700	0.4380	3.365	5.393	0.3755	4	-0.46	003.10	0
003	Water Insoluble Nitrogen (%)	0498	11.45	0.7000	3.365	5.393	0.3755	4	1.50	003.99	0
005	Urea Nitrogen (%)	0389	14.82	0.1700	15.34	0.5660	0.2133	6	-0.93	005.00	0
005	Urea Nitrogen (%)	0029	14.89	0.6700	15.34	0.5660	0.2133	6	-0.81	005.99	0
005	Urea Nitrogen (%)	0027	15.11	0.0400	15.34	0.5660	0.2133	6	-0.41	005.99	0
005	Urea Nitrogen (%)	0394	15.52	0.0700	15.34	0.5660	0.2133	6	0.31	005.99	0
005	Urea Nitrogen (%)	0368	15.61	0.0800	15.34	0.5660	0.2133	6	0.47	005.00	0
005	Urea Nitrogen (%)	0481	19.37	0.2500	15.34	0.5660	0.2133	6	7.11	005.99	0
007	Urea (%)	0230	11.20	0.0000	13.54	3.306	0.0150	2	-0.71	007.00	0
007	Urea (%)	0220	15.88	0.0300	13.54	3.306	0.0150	2	0.71	007.99	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0444	5.925	0.3300			0.3300	1			0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010	Total Nitrogen (32%)	0443	31.15*	0.1000	32.34	0.4067	0.1745	77	-2.92	010.60	0
010	Total Nitrogen (32%)	0500	31.40*	0.4000	32.34	0.4067	0.1745	77	-2.31	010.11	0
010	Total Nitrogen (32%)	0444	31.40*	0.4400	32.34	0.4067	0.1745	77	-2.31	010.60	0
010	Total Nitrogen (32%)	0506	31.50	0.6000	32.34	0.4067	0.1745	77	-2.06	010.99	0
010	Total Nitrogen (32%)	0421	31.52	0.0200	32.34	0.4067	0.1745	77	-2.01	010.60	0
010	Total Nitrogen (32%)	0114	31.61	0.0200	32.34	0.4067	0.1745	77	-1.79	010.11	0
010	Total Nitrogen (32%)	0415	31.63	0.1800	32.34	0.4067	0.1745	77	-1.74	010.99	0
010	Total Nitrogen (32%)	0481	31.69	0.4000	32.34	0.4067	0.1745	77	-1.59	010.12	0
010	Total Nitrogen (32%)	0102	31.73	0.1400	32.34	0.4067	0.1745	77	-1.49	010.60	0
010	Total Nitrogen (32%)	0486	31.78	0.1900	32.34	0.4067	0.1745	77	-1.38	010.60	0
010	Total Nitrogen (32%)	0493	31.85	0.1000	32.34	0.4067	0.1745	77	-1.20	010.99	0
010	Total Nitrogen (32%)	0389	31.88	0.1900	32.34	0.4067	0.1745	77	-1.14	010.60	0
010	Total Nitrogen (32%)	0451	31.95	0.1000	32.34	0.4067	0.1745	77	-0.95	010.60	0
010	Total Nitrogen (32%)	0377	32.03	0.0500	32.34	0.4067	0.1745	77	-0.77	010.60	0
010	Total Nitrogen (32%)	0510	32.03	0.1800	32.34	0.4067	0.1745	77	-0.76	010.11	0
010	Total Nitrogen (32%)	0368	32.03	0.0490	32.34	0.4067	0.1745	77	-0.75	010.60	0
010	Total Nitrogen (32%)	0487	32.05	0.3000	32.34	0.4067	0.1745	77	-0.71	010.99	0
010	Total Nitrogen (32%)	0494	32.06	0.3300	32.34	0.4067	0.1745	77	-0.70	010.60	0
010	Total Nitrogen (32%)	0371	32.08	0.3100	32.34	0.4067	0.1745	77	-0.65	010.11	0
010	Total Nitrogen (32%)	0508	32.08	0.1680	32.34	0.4067	0.1745	77	-0.64	010.60	0
010	Total Nitrogen (32%)	0397	32.10	0.2000	32.34	0.4067	0.1745	77	-0.58	010.12	0
010	Total Nitrogen (32%)	0023	32.13	0.1610	32.34	0.4067	0.1745	77	-0.51	010.60	0
010	Total Nitrogen (32%)	0043	32.17	0.0000	32.34	0.4067	0.1745	77	-0.41	010.60	0
010	Total Nitrogen (32%)	0070	32.18	0.8200	32.34	0.4067	0.1745	77	-0.39	010.60	0
010	Total Nitrogen (32%)	0482	32.20	0.4000	32.34	0.4067	0.1745	77	-0.34	010.60	0
010	Total Nitrogen (32%)	0096	32.21	0.0500	32.34	0.4067	0.1745	77	-0.33	010.60	0
010	Total Nitrogen (32%)	0291	32.21	0.0100	32.34	0.4067	0.1745	77	-0.33	010.60	0
010	Total Nitrogen (32%)	0231	32.21	0.0400	32.34	0.4067	0.1745	77	-0.31	010.60	0
010	Total Nitrogen (32%)	0406	32.21	0.3800	32.34	0.4067	0.1745	77	-0.31	010.60	0
010	Total Nitrogen (32%)	0234	32.22	0.1500	32.34	0.4067	0.1745	77	-0.30	010.60	0
010	Total Nitrogen (32%)	0402	32.22	0.0200	32.34	0.4067	0.1745	77	-0.29	010.60	0
010	Total Nitrogen (32%)	0483	32.22	0.1000	32.34	0.4067	0.1745	77	-0.29	010.60	0
010	Total Nitrogen (32%)	0456	32.23	0.0500	32.34	0.4067	0.1745	77	-0.28	010.11	0
010	Total Nitrogen (32%)	0018	32.25	0.1000	32.34	0.4067	0.1745	77	-0.22	010.60	0
010	Total Nitrogen (32%)	0405	32.33	0.0400	32.34	0.4067	0.1745	77	-0.02	010.60	0
010	Total Nitrogen (32%)	0037	32.34	0.0370	32.34	0.4067	0.1745	77	0.00	010.60	0
010	Total Nitrogen (32%)	0211	32.35	0.1000	32.34	0.4067	0.1745	77	0.03	010.11	0
010	Total Nitrogen (32%)	0040	32.35	0.3000	32.34	0.4067	0.1745	77	0.03	010.60	0
010	Total Nitrogen (32%)	0489	32.37	0.0300	32.34	0.4067	0.1745	77	0.07	010.60	0
010	Total Nitrogen (32%)	0292	32.39	0.0100	32.34	0.4067	0.1745	77	0.12	010.60	0
010	Total Nitrogen (32%)	0416	32.40	0.0300	32.34	0.4067	0.1745	77	0.14	010.11	0
010	Total Nitrogen (32%)	0220	32.40	0.1700	32.34	0.4067	0.1745	77	0.14	010.99	0
010	Total Nitrogen (32%)	0157	32.40	0.2000	32.34	0.4067	0.1745	77	0.15	010.60	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010	Total Nitrogen (32%)	0230	32.40	0.0000	32.34	0.4067	0.1745	77	0.15	010.60	0
010	Total Nitrogen (32%)	0516	32.40	0.0000	32.34	0.4067	0.1745	77	0.15	010.60	0
010	Total Nitrogen (32%)	0356	32.42	0.1300	32.34	0.4067	0.1745	77	0.19	010.60	0
010	Total Nitrogen (32%)	0360	32.44	0.0100	32.34	0.4067	0.1745	77	0.24	010.60	0
010	Total Nitrogen (32%)	0136	32.45	0.0600	32.34	0.4067	0.1745	77	0.28	010.60	0
010	Total Nitrogen (32%)	0095	32.47	0.1900	32.34	0.4067	0.1745	77	0.31	010.60	0
010	Total Nitrogen (32%)	0233	32.49	0.1200	32.34	0.4067	0.1745	77	0.37	010.60	0
010	Total Nitrogen (32%)	0105	32.50	0.1700	32.34	0.4067	0.1745	77	0.39	010.11	0
010	Total Nitrogen (32%)	0394	32.50	0.0000	32.34	0.4067	0.1745	77	0.40	010.60	0
010	Total Nitrogen (32%)	0090	32.52	0.1200	32.34	0.4067	0.1745	77	0.45	010.11	0
010	Total Nitrogen (32%)	0324	32.55	0.1000	32.34	0.4067	0.1745	77	0.52	010.60	0
010	Total Nitrogen (32%)	0185	32.58	0.2700	32.34	0.4067	0.1745	77	0.58	010.12	0
010	Total Nitrogen (32%)	0024	32.60	0.2000	32.34	0.4067	0.1745	77	0.64	010.60	0
010	Total Nitrogen (32%)	0452	32.61	0.0100	32.34	0.4067	0.1745	77	0.66	010.60	0
010	Total Nitrogen (32%)	0072	32.61	0.1200	32.34	0.4067	0.1745	77	0.67	010.60	0
010	Total Nitrogen (32%)	0498	32.65	0.3000	32.34	0.4067	0.1745	77	0.77	010.12	0
010	Total Nitrogen (32%)	0275	32.66	0.0200	32.34	0.4067	0.1745	77	0.79	010.60	0
010	Total Nitrogen (32%)	0055	32.67	0.4400	32.34	0.4067	0.1745	77	0.82	010.60	0
010	Total Nitrogen (32%)	0307	32.69	0.0450	32.34	0.4067	0.1745	77	0.87	010.60	0
010	Total Nitrogen (32%)	0007	32.70	0.2000	32.34	0.4067	0.1745	77	0.89	010.60	0
010	Total Nitrogen (32%)	0177	32.70	0.0600	32.34	0.4067	0.1745	77	0.89	010.60	0
010	Total Nitrogen (32%)	0049	32.74	0.0800	32.34	0.4067	0.1745	77	0.99	010.60	0
010	Total Nitrogen (32%)	0035	32.75	0.0400	32.34	0.4067	0.1745	77	1.01	010.60	0
010	Total Nitrogen (32%)	0390	32.75	0.5000	32.34	0.4067	0.1745	77	1.01	010.60	0
010	Total Nitrogen (32%)	0025	32.76	0.7500	32.34	0.4067	0.1745	77	1.03	010.60	0
010	Total Nitrogen (32%)	0105	32.77	0.2420	32.34	0.4067	0.1745	77	1.05	010.60	0
010	Total Nitrogen (32%)	0029	32.79	0.2600	32.34	0.4067	0.1745	77	1.11	010.60	0
010	Total Nitrogen (32%)	0354	32.86	0.0350	32.34	0.4067	0.1745	77	1.29	010.60	0
010	Total Nitrogen (32%)	0162	32.90	0.1800	32.34	0.4067	0.1745	77	1.38	010.60	0
010	Total Nitrogen (32%)	0042	32.91	0.1700	32.34	0.4067	0.1745	77	1.39	010.60	0
010	Total Nitrogen (32%)	0513	33.01	0.0200	32.34	0.4067	0.1745	77	1.65	010.11	0
010	Total Nitrogen (32%)	0131	33.10	0.6600	32.34	0.4067	0.1745	77	1.87	010.60	0
010	Total Nitrogen (32%)	0351	33.21	0.1170	32.34	0.4067	0.1745	77	2.14	010.60	0
010	Total Nitrogen (32%)	0073	38.90	0.1500	32.34	0.4067	0.1745	77	16.12	010.60	0
010	Total Nitrogen (32%)	0472	31.95	1.330	32.34	0.4067	0.1745	77	-0.97	010.60	1
010	Total Nitrogen (32%)	0457	33.50	1.800	32.34	0.4067	0.1745	77	2.86	010.60	1
010	Total Nitrogen (32%)	0041	11.73*	0.0300	32.34	0.4067	0.1745	77	-50.68	010.60	2
020	Total Phosphorus as P2O5 (%)	0096	0.1600	0.0200	1.430	2.114	0.0667	3	-0.60	020.40	0
020	Total Phosphorus as P2O5 (%)	0292	0.2600	0.0000	1.430	2.114	0.0667	3	-0.55	020.20	0
020	Total Phosphorus as P2O5 (%)	0042	3.870	0.1800	1.430	2.114	0.0667	3	1.15	020.40	0
020	Total Phosphorus as P2O5 (%)	0322	0.0000	0.0000	1.430	2.114	0.0667	3	-0.68	020.10	4
020	Total Phosphorus as P2O5 (%)	0389	0.0000	0.0000	1.430	2.114	0.0667	3	-0.68	020.50	4
041	Direct Available Phosphorus as P2O5 (%)	0354	0.4510	0.1360	1.430	2.114	0.1360	1	-0.46	041.60	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
041	Direct Available Phosphorus as P2O5 (%)	0018	0.0000	0.0000	1.430	2.114	0.1360	1	-0.68	041.40	4
041	Direct Available Phosphorus as P2O5 (%)	0421	0.0000	0.0000	1.430	2.114	0.1360	1	-0.68	041.51	4
041	Direct Available Phosphorus as P2O5 (%)	0377	0.0050	0.0100	1.430	2.114	0.1360	1	-0.67	041.51	4
048	Water Soluble Phosphorus as P2O5 (%)	0096	0.0500	0.0200			0.0200	1			0
050	Soluble Potassium as K2O (4%)	0501	3.180*	0.1600	3.957	0.1684	0.0795	84	-4.61	050.99	0
050	Soluble Potassium as K2O (4%)	0443	3.305*	0.0100	3.957	0.1684	0.0795	84	-3.87	050.60	0
050	Soluble Potassium as K2O (4%)	0307	3.400*	0.2600	3.957	0.1684	0.0795	84	-3.31	050.99	0
050	Soluble Potassium as K2O (4%)	0402	3.447*	0.0060	3.957	0.1684	0.0795	84	-3.03	050.99	0
050	Soluble Potassium as K2O (4%)	0516	3.595	0.3500	3.957	0.1684	0.0795	84	-2.15	050.30	0
050	Soluble Potassium as K2O (4%)	0428	3.665	0.1845	3.957	0.1684	0.0795	84	-1.73	050.30	0
050	Soluble Potassium as K2O (4%)	0389	3.715	0.0300	3.957	0.1684	0.0795	84	-1.44	050.99	0
050	Soluble Potassium as K2O (4%)	0157	3.725	0.0500	3.957	0.1684	0.0795	84	-1.38	050.50	0
050	Soluble Potassium as K2O (4%)	0482	3.725	0.0100	3.957	0.1684	0.0795	84	-1.38	050.99	0
050	Soluble Potassium as K2O (4%)	0114	3.730	0.0000	3.957	0.1684	0.0795	84	-1.35	050.00	0
050	Soluble Potassium as K2O (4%)	0234	3.745	0.0300	3.957	0.1684	0.0795	84	-1.26	050.99	0
050	Soluble Potassium as K2O (4%)	0494	3.770	0.1200	3.957	0.1684	0.0795	84	-1.11	050.00	0
050	Soluble Potassium as K2O (4%)	0510	3.780	0.0000	3.957	0.1684	0.0795	84	-1.05	050.60	0
050	Soluble Potassium as K2O (4%)	0481	3.780	0.0200	3.957	0.1684	0.0795	84	-1.05	050.99	0
050	Soluble Potassium as K2O (4%)	0451	3.785	0.0300	3.957	0.1684	0.0795	84	-1.02	050.99	0
050	Soluble Potassium as K2O (4%)	0292	3.790	0.0200	3.957	0.1684	0.0795	84	-0.99	050.50	0
050	Soluble Potassium as K2O (4%)	0485	3.790	0.1000	3.957	0.1684	0.0795	84	-0.99	050.52	0
050	Soluble Potassium as K2O (4%)	0070	3.795	0.0100	3.957	0.1684	0.0795	84	-0.96	050.51	0
050	Soluble Potassium as K2O (4%)	0390	3.800	0.0600	3.957	0.1684	0.0795	84	-0.93	050.50	0
050	Soluble Potassium as K2O (4%)	0072	3.812	0.1160	3.957	0.1684	0.0795	84	-0.86	050.00	0
050	Soluble Potassium as K2O (4%)	0457	3.815	0.0100	3.957	0.1684	0.0795	84	-0.84	050.99	0
050	Soluble Potassium as K2O (4%)	0489	3.865	0.0900	3.957	0.1684	0.0795	84	-0.54	050.00	0
050	Soluble Potassium as K2O (4%)	0029	3.865	0.0100	3.957	0.1684	0.0795	84	-0.54	050.62	0
050	Soluble Potassium as K2O (4%)	0024	3.870	0.0200	3.957	0.1684	0.0795	84	-0.52	050.61	0
050	Soluble Potassium as K2O (4%)	0105	3.870	0.0600	3.957	0.1684	0.0795	84	-0.52	050.62	0
050	Soluble Potassium as K2O (4%)	0043	3.875	0.0500	3.957	0.1684	0.0795	84	-0.49	050.51	0
050	Soluble Potassium as K2O (4%)	0472	3.885	0.0300	3.957	0.1684	0.0795	84	-0.43	050.31	0
050	Soluble Potassium as K2O (4%)	0275	3.890	0.0000	3.957	0.1684	0.0795	84	-0.40	050.99	0
050	Soluble Potassium as K2O (4%)	0018	3.895	0.0100	3.957	0.1684	0.0795	84	-0.37	050.62	0
050	Soluble Potassium as K2O (4%)	0258	3.900	0.1200	3.957	0.1684	0.0795	84	-0.34	050.00	0
050	Soluble Potassium as K2O (4%)	0040	3.900	0.0000	3.957	0.1684	0.0795	84	-0.34	050.30	0
050	Soluble Potassium as K2O (4%)	0043	3.900	0.0400	3.957	0.1684	0.0795	84	-0.34	050.99	0
050	Soluble Potassium as K2O (4%)	0394	3.900	0.0000	3.957	0.1684	0.0795	84	-0.34	050.99	0
050	Soluble Potassium as K2O (4%)	0452	3.905	0.0300	3.957	0.1684	0.0795	84	-0.31	050.51	0
050	Soluble Potassium as K2O (4%)	0090	3.920	0.0800	3.957	0.1684	0.0795	84	-0.22	050.00	0
050	Soluble Potassium as K2O (4%)	0055	3.930	0.0400	3.957	0.1684	0.0795	84	-0.16	050.50	0
050	Soluble Potassium as K2O (4%)	0105	3.935	0.0300	3.957	0.1684	0.0795	84	-0.13	050.60	0
050	Soluble Potassium as K2O (4%)	0157	3.940	0.0200	3.957	0.1684	0.0795	84	-0.10	050.30	0
050	Soluble Potassium as K2O (4%)	0220	3.950	0.0400	3.957	0.1684	0.0795	84	-0.04	050.00	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
050	Soluble Potassium as K2O (4%)	0007	3.950	0.1000	3.957	0.1684	0.0795	84	-0.04	050.51	0
050	Soluble Potassium as K2O (4%)	0231	3.955	0.0500	3.957	0.1684	0.0795	84	-0.01	050.99	0
050	Soluble Potassium as K2O (4%)	0416	3.960	0.0600	3.957	0.1684	0.0795	84	0.02	050.00	0
050	Soluble Potassium as K2O (4%)	0185	3.975	0.1100	3.957	0.1684	0.0795	84	0.11	050.30	0
050	Soluble Potassium as K2O (4%)	0105	3.975	0.0300	3.957	0.1684	0.0795	84	0.11	050.99	0
050	Soluble Potassium as K2O (4%)	0371	3.975	0.0100	3.957	0.1684	0.0795	84	0.11	050.99	0
050	Soluble Potassium as K2O (4%)	0500	3.975	0.0500	3.957	0.1684	0.0795	84	0.11	050.99	0
050	Soluble Potassium as K2O (4%)	0096	3.980	0.1600	3.957	0.1684	0.0795	84	0.14	050.99	0
050	Soluble Potassium as K2O (4%)	0211	3.980	0.0200	3.957	0.1684	0.0795	84	0.14	050.00	0
050	Soluble Potassium as K2O (4%)	0356	3.985	0.0700	3.957	0.1684	0.0795	84	0.17	050.30	0
050	Soluble Potassium as K2O (4%)	0456	3.985	0.0700	3.957	0.1684	0.0795	84	0.17	050.61	0
050	Soluble Potassium as K2O (4%)	0486	3.990	0.1600	3.957	0.1684	0.0795	84	0.20	050.51	0
050	Soluble Potassium as K2O (4%)	0233	3.992	0.0570	3.957	0.1684	0.0795	84	0.21	050.52	0
050	Soluble Potassium as K2O (4%)	0136	3.995	0.0300	3.957	0.1684	0.0795	84	0.23	050.30	0
050	Soluble Potassium as K2O (4%)	0354	3.999	0.1960	3.957	0.1684	0.0795	84	0.25	050.52	0
050	Soluble Potassium as K2O (4%)	0360	4.000	0.0200	3.957	0.1684	0.0795	84	0.26	050.52	0
050	Soluble Potassium as K2O (4%)	0487	4.000	0.0000	3.957	0.1684	0.0795	84	0.26	050.99	0
050	Soluble Potassium as K2O (4%)	0231	4.015	0.1100	3.957	0.1684	0.0795	84	0.35	050.00	0
050	Soluble Potassium as K2O (4%)	0506	4.025	0.1500	3.957	0.1684	0.0795	84	0.41	050.99	0
050	Soluble Potassium as K2O (4%)	0291	4.030	0.0200	3.957	0.1684	0.0795	84	0.44	050.51	0
050	Soluble Potassium as K2O (4%)	0513	4.030	0.0200	3.957	0.1684	0.0795	84	0.44	050.61	0
050	Soluble Potassium as K2O (4%)	0177	4.033	0.1483	3.957	0.1684	0.0795	84	0.45	050.99	0
050	Soluble Potassium as K2O (4%)	0322	4.039	0.0850	3.957	0.1684	0.0795	84	0.49	050.10	0
050	Soluble Potassium as K2O (4%)	0368	4.063	0.2568	3.957	0.1684	0.0795	84	0.63	050.99	0
050	Soluble Potassium as K2O (4%)	0483	4.075	0.1700	3.957	0.1684	0.0795	84	0.70	050.51	0
050	Soluble Potassium as K2O (4%)	0324	4.080	0.2400	3.957	0.1684	0.0795	84	0.73	050.50	0
050	Soluble Potassium as K2O (4%)	0444	4.080	0.1400	3.957	0.1684	0.0795	84	0.73	050.50	0
050	Soluble Potassium as K2O (4%)	0508	4.081	0.1260	3.957	0.1684	0.0795	84	0.74	050.99	0
050	Soluble Potassium as K2O (4%)	0169	4.090	0.0800	3.957	0.1684	0.0795	84	0.79	050.60	0
050	Soluble Potassium as K2O (4%)	0498	4.100	0.0000	3.957	0.1684	0.0795	84	0.85	050.10	0
050	Soluble Potassium as K2O (4%)	0095	4.105	0.1900	3.957	0.1684	0.0795	84	0.88	050.62	0
050	Soluble Potassium as K2O (4%)	0494	4.115	0.0700	3.957	0.1684	0.0795	84	0.94	050.61	0
050	Soluble Potassium as K2O (4%)	0377	4.150	0.3000	3.957	0.1684	0.0795	84	1.15	050.52	0
050	Soluble Potassium as K2O (4%)	0023	4.180	0.1400	3.957	0.1684	0.0795	84	1.33	050.52	0
050	Soluble Potassium as K2O (4%)	0421	4.200	0.0200	3.957	0.1684	0.0795	84	1.44	050.52	0
050	Soluble Potassium as K2O (4%)	0493	4.200	0.1000	3.957	0.1684	0.0795	84	1.44	050.99	0
050	Soluble Potassium as K2O (4%)	0049	4.225	0.0700	3.957	0.1684	0.0795	84	1.59	050.00	0
050	Soluble Potassium as K2O (4%)	0055	4.235	0.0500	3.957	0.1684	0.0795	84	1.65	050.00	0
050	Soluble Potassium as K2O (4%)	0025	4.235	0.2100	3.957	0.1684	0.0795	84	1.65	050.51	0
050	Soluble Potassium as K2O (4%)	0102	4.300	0.0000	3.957	0.1684	0.0795	84	2.04	050.00	0
050	Soluble Potassium as K2O (4%)	0027	4.347	0.0140	3.957	0.1684	0.0795	84	2.32	050.99	0
050	Soluble Potassium as K2O (4%)	0405	4.520	0.2600	3.957	0.1684	0.0795	84	3.35	050.00	0
050	Soluble Potassium as K2O (4%)	0444	4.545	0.1500	3.957	0.1684	0.0795	84	3.49	050.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
050	Soluble Potassium as K2O (4%)	0072	4.710	0.0200	3.957	0.1684	0.0795	84	4.47	050.51	0
050	Soluble Potassium as K2O (4%)	0117	5.110	0.1000	3.957	0.1684	0.0795	84	6.85	050.10	0
050	Soluble Potassium as K2O (4%)	0230	4.175	0.5700	3.957	0.1684	0.0795	84	1.30	050.00	1
050	Soluble Potassium as K2O (4%)	0037	4.294	0.5630	3.957	0.1684	0.0795	84	2.00	050.61	1
050	Soluble Potassium as K2O (4%)	0406	4.915	0.4500	3.957	0.1684	0.0795	84	5.69	050.50	1
060	Water (Free) (%)	0007	1.180	0.1000	1.948	1.387	0.0421	5	-0.55	060.00	0
060	Water (Free) (%)	0456	1.260	0.0200	1.948	1.387	0.0421	5	-0.50	060.00	0
060	Water (Free) (%)	0416	1.374	0.0007	1.948	1.387	0.0421	5	-0.41	060.00	0
060	Water (Free) (%)	0096	1.505	0.0300	1.948	1.387	0.0421	5	-0.32	060.00	0
060	Water (Free) (%)	0510	4.420	0.0600	1.948	1.387	0.0421	5	1.78	060.99	0
101	Acid Soluble Calcium (%)	0421	0.0355	0.0150	0.0418	0.0054	0.0097	10	-1.18	101.33	0
101	Acid Soluble Calcium (%)	0105	0.0360	0.0016	0.0418	0.0054	0.0097	10	-1.08	101.00	0
101	Acid Soluble Calcium (%)	0494	0.0391	0.0028	0.0418	0.0054	0.0097	10	-0.51	101.31	0
101	Acid Soluble Calcium (%)	0482	0.0400	0.0000	0.0418	0.0054	0.0097	10	-0.34	101.30	0
101	Acid Soluble Calcium (%)	0389	0.0400	0.0000	0.0418	0.0054	0.0097	10	-0.34	101.99	0
101	Acid Soluble Calcium (%)	0351	0.0412	0.0057	0.0418	0.0054	0.0097	10	-0.13	101.30	0
101	Acid Soluble Calcium (%)	0494	0.0427	0.0029	0.0418	0.0054	0.0097	10	0.15	101.33	0
101	Acid Soluble Calcium (%)	0049	0.0585	0.0190	0.0418	0.0054	0.0097	10	3.10	101.30	0
101	Acid Soluble Calcium (%)	0096	0.1000	0.0200	0.0418	0.0054	0.0097	10	10.81	101.30	0
101	Acid Soluble Calcium (%)	0041	0.2250	0.0300	0.0418	0.0054	0.0097	10	34.05	101.30	0
101	Acid Soluble Calcium (%)	0354	0.1020	0.0640	0.0418	0.0054	0.0097	10	11.19	101.30	1
121	Acid Soluble Magnesium (%)	0389	0.0265	0.0010	0.0340	0.0064	0.0065	14	-1.18	121.99	0
121	Acid Soluble Magnesium (%)	0105	0.0274	0.0008	0.0340	0.0064	0.0065	14	-1.04	121.00	0
121	Acid Soluble Magnesium (%)	0049	0.0275	0.0030	0.0340	0.0064	0.0065	14	-1.02	121.30	0
121	Acid Soluble Magnesium (%)	0096	0.0300	0.0000	0.0340	0.0064	0.0065	14	-0.63	121.30	0
121	Acid Soluble Magnesium (%)	0501	0.0300	0.0020	0.0340	0.0064	0.0065	14	-0.63	121.99	0
121	Acid Soluble Magnesium (%)	0351	0.0314	0.0065	0.0340	0.0064	0.0065	14	-0.42	121.30	0
121	Acid Soluble Magnesium (%)	0494	0.0327	0.0003	0.0340	0.0064	0.0065	14	-0.22	121.33	0
121	Acid Soluble Magnesium (%)	0494	0.0336	0.0016	0.0340	0.0064	0.0065	14	-0.07	121.31	0
121	Acid Soluble Magnesium (%)	0421	0.0360	0.0000	0.0340	0.0064	0.0065	14	0.31	121.33	0
121	Acid Soluble Magnesium (%)	0055	0.0375	0.0150	0.0340	0.0064	0.0065	14	0.54	121.30	0
121	Acid Soluble Magnesium (%)	0390	0.0386	0.0039	0.0340	0.0064	0.0065	14	0.70	121.30	0
121	Acid Soluble Magnesium (%)	0482	0.0400	0.0200	0.0340	0.0064	0.0065	14	0.93	121.30	0
121	Acid Soluble Magnesium (%)	0035	0.0420	0.0280	0.0340	0.0064	0.0065	14	1.24	121.30	0
121	Acid Soluble Magnesium (%)	0354	0.0445	0.0090	0.0340	0.0064	0.0065	14	1.64	121.30	0
121	Acid Soluble Magnesium (%)	0041	0.5150	0.0100	0.0340	0.0064	0.0065	14	75.26	121.30	2
143	Elemental Sulfur (%)	0472	7.250	0.4600	7.702	0.3489	0.1933	6	-1.29	143.99	0
143	Elemental Sulfur (%)	0025	7.440	0.0400	7.702	0.3489	0.1933	6	-0.75	143.00	0
143	Elemental Sulfur (%)	0389	7.745	0.1300	7.702	0.3489	0.1933	6	0.12	143.99	0
143	Elemental Sulfur (%)	0390	7.755	0.3700	7.702	0.3489	0.1933	6	0.15	143.99	0
143	Elemental Sulfur (%)	0055	7.955	0.1300	7.702	0.3489	0.1933	6	0.73	143.00	0
143	Elemental Sulfur (%)	0291	8.065	0.0300	7.702	0.3489	0.1933	6	1.04	143.99	0
145	Sulfate Sulfur, HCl soluble (%)	0444	7.110	0.1000	7.585	0.3295	0.0876	5	-1.44	145.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
145	Sulfate Sulfur, HCl soluble (%)	0169	7.370	0.1200	7.585	0.3295	0.0876	5	-0.65	145.99	0
145	Sulfate Sulfur, HCl soluble (%)	0233	7.790	0.0080	7.585	0.3295	0.0876	5	0.62	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0027	7.790	0.1400	7.585	0.3295	0.0876	5	0.62	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0397	7.865	0.0700	7.585	0.3295	0.0876	5	0.85	145.00	0
148	Total Sulfur (7%)	0515	6.700*	0.1690	7.625	0.2973	0.1327	46	-3.11	148.07	0
148	Total Sulfur (7%)	0444	6.885*	0.1100	7.625	0.2973	0.1327	46	-2.49	148.07	0
148	Total Sulfur (7%)	0508	7.009*	0.3650	7.625	0.2973	0.1327	46	-2.07	148.99	0
148	Total Sulfur (7%)	0023	7.093	0.3120	7.625	0.2973	0.1327	46	-1.79	148.07	0
148	Total Sulfur (7%)	0351	7.120	0.0324	7.625	0.2973	0.1327	46	-1.70	148.00	0
148	Total Sulfur (7%)	0494	7.164	0.1175	7.625	0.2973	0.1327	46	-1.55	148.07	0
148	Total Sulfur (7%)	0483	7.285	0.2700	7.625	0.2973	0.1327	46	-1.14	148.07	0
148	Total Sulfur (7%)	0482	7.305	0.0500	7.625	0.2973	0.1327	46	-1.08	148.99	0
148	Total Sulfur (7%)	0394	7.310	0.3600	7.625	0.2973	0.1327	46	-1.06	148.07	0
148	Total Sulfur (7%)	0406	7.350	0.2000	7.625	0.2973	0.1327	46	-0.92	148.07	0
148	Total Sulfur (7%)	0501	7.400	0.0800	7.625	0.2973	0.1327	46	-0.76	148.99	0
148	Total Sulfur (7%)	0486	7.430	0.1800	7.625	0.2973	0.1327	46	-0.65	148.07	0
148	Total Sulfur (7%)	0136	7.455	0.0700	7.625	0.2973	0.1327	46	-0.57	148.00	0
148	Total Sulfur (7%)	0481	7.465	0.0700	7.625	0.2973	0.1327	46	-0.54	148.01	0
148	Total Sulfur (7%)	0452	7.480	0.0000	7.625	0.2973	0.1327	46	-0.49	148.99	0
148	Total Sulfur (7%)	0371	7.515	0.1300	7.625	0.2973	0.1327	46	-0.37	148.99	0
148	Total Sulfur (7%)	0275	7.545	0.0500	7.625	0.2973	0.1327	46	-0.27	148.99	0
148	Total Sulfur (7%)	0451	7.565	0.3500	7.625	0.2973	0.1327	46	-0.20	148.00	0
148	Total Sulfur (7%)	0513	7.590	0.0600	7.625	0.2973	0.1327	46	-0.12	148.99	0
148	Total Sulfur (7%)	0157	7.610	0.0600	7.625	0.2973	0.1327	46	-0.05	148.00	0
148	Total Sulfur (7%)	0405	7.613	0.0470	7.625	0.2973	0.1327	46	-0.04	148.01	0
148	Total Sulfur (7%)	0354	7.621	0.1130	7.625	0.2973	0.1327	46	-0.01	148.99	0
148	Total Sulfur (7%)	0040	7.650	0.1000	7.625	0.2973	0.1327	46	0.09	148.01	0
148	Total Sulfur (7%)	0513	7.665	0.0300	7.625	0.2973	0.1327	46	0.14	148.01	0
148	Total Sulfur (7%)	0096	7.670	0.3800	7.625	0.2973	0.1327	46	0.15	148.99	0
148	Total Sulfur (7%)	0105	7.685	0.0900	7.625	0.2973	0.1327	46	0.20	148.01	0
148	Total Sulfur (7%)	0037	7.705	0.1030	7.625	0.2973	0.1327	46	0.27	148.07	0
148	Total Sulfur (7%)	0102	7.730	0.1610	7.625	0.2973	0.1327	46	0.35	148.07	0
148	Total Sulfur (7%)	0029	7.731	0.0290	7.625	0.2973	0.1327	46	0.36	148.00	0
148	Total Sulfur (7%)	0102	7.784	0.0570	7.625	0.2973	0.1327	46	0.53	148.01	0
148	Total Sulfur (7%)	0324	7.810	0.0200	7.625	0.2973	0.1327	46	0.62	148.01	0
148	Total Sulfur (7%)	0307	7.820	0.0990	7.625	0.2973	0.1327	46	0.66	148.99	0
148	Total Sulfur (7%)	0457	7.825	0.0900	7.625	0.2973	0.1327	46	0.67	148.01	0
148	Total Sulfur (7%)	0095	7.835	0.0100	7.625	0.2973	0.1327	46	0.71	148.01	0
148	Total Sulfur (7%)	0029	7.845	0.0100	7.625	0.2973	0.1327	46	0.74	148.01	0
148	Total Sulfur (7%)	0043	7.875	0.0500	7.625	0.2973	0.1327	46	0.84	148.01	0
148	Total Sulfur (7%)	0114	7.875	0.1300	7.625	0.2973	0.1327	46	0.84	148.01	0
148	Total Sulfur (7%)	0177	7.889	0.0013	7.625	0.2973	0.1327	46	0.89	148.07	0
148	Total Sulfur (7%)	0360	7.900	0.4600	7.625	0.2973	0.1327	46	0.93	148.00	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
148	Total Sulfur (7%)	0049	7.910	0.0800	7.625	0.2973	0.1327	46	0.96	148.00	0
148	Total Sulfur (7%)	0485	7.910	0.0600	7.625	0.2973	0.1327	46	0.96	148.01	0
148	Total Sulfur (7%)	0421	7.910	0.1200	7.625	0.2973	0.1327	46	0.96	148.07	0
148	Total Sulfur (7%)	0157	7.960	0.3800	7.625	0.2973	0.1327	46	1.13	148.01	0
148	Total Sulfur (7%)	0131	7.965	0.0300	7.625	0.2973	0.1327	46	1.14	148.00	0
148	Total Sulfur (7%)	0230	8.040	0.2800	7.625	0.2973	0.1327	46	1.40	148.01	0
148	Total Sulfur (7%)	0506	8.280	0.1400	7.625	0.2973	0.1327	46	2.20	148.99	0
149	Sulfur - HNO3 soluble (%)	0368	6.924	0.8362			0.8362	1			0
151	Acid Soluble Arsenic (ppm)	0415	0.1600	0.0000	0.3298	0.1419	0.0338	7	-1.20	151.99	0
151	Acid Soluble Arsenic (ppm)	0230	0.2480	0.0300	0.3298	0.1419	0.0338	7	-0.58	151.30	0
151	Acid Soluble Arsenic (ppm)	0501	0.2600	0.0000	0.3298	0.1419	0.0338	7	-0.49	151.34	0
151	Acid Soluble Arsenic (ppm)	0394	0.3241	0.0028	0.3298	0.1419	0.0338	7	-0.04	151.30	0
151	Acid Soluble Arsenic (ppm)	0136	0.3300	0.0200	0.3298	0.1419	0.0338	7	0.00	151.00	0
151	Acid Soluble Arsenic (ppm)	0025	0.9100	0.0240	0.3298	0.1419	0.0338	7	4.09	151.00	0
151	Acid Soluble Arsenic (ppm)	0368	2.910	0.1600	0.3298	0.1419	0.0338	7	18.18	151.30	0
151	Acid Soluble Arsenic (ppm)	0389	3.200	0.4000	0.3298	0.1419	0.0338	7	20.23	151.30	1
151	Acid Soluble Arsenic (ppm)	0515	0.0000	0.0000	0.3298	0.1419	0.0338	7	-2.32	151.34	4
165	Acid Soluble Boron (%)	0354	0.0070	0.0020	0.3298	0.1419	0.0020	1	-2.28	165.30	0
165	Acid Soluble Boron (%)	0421	0.0000	0.0000	0.3298	0.1419	0.0020	1	-2.32	165.99	4
181	Acid Soluble Cadmium (ppm)	0515	0.0668	0.0023	0.4079	0.4394	0.0471	5	-0.78	181.34	0
181	Acid Soluble Cadmium (ppm)	0035	0.1810	0.1920	0.4079	0.4394	0.0471	5	-0.52	181.30	0
181	Acid Soluble Cadmium (ppm)	0230	0.2115	0.0150	0.4079	0.4394	0.0471	5	-0.45	181.30	0
181	Acid Soluble Cadmium (ppm)	0494	0.4202	0.0263	0.4079	0.4394	0.0471	5	0.03	181.33	0
181	Acid Soluble Cadmium (ppm)	0415	1.160	0.0000	0.4079	0.4394	0.0471	5	1.71	181.99	0
181	Acid Soluble Cadmium (ppm)	0368	0.7904	1.499	0.4079	0.4394	0.0471	5	0.87	181.30	1
181	Acid Soluble Cadmium (ppm)	0394	0.0000	0.0000	0.4079	0.4394	0.0471	5	-0.93	181.30	4
191	Acid Soluble Chromium (ppm)	0501	11.88	0.7300	21.02	3.940	1.277	13	-2.32	191.34	0
191	Acid Soluble Chromium (ppm)	0515	17.10	0.2940	21.02	3.940	1.277	13	-1.00	191.34	0
191	Acid Soluble Chromium (ppm)	0035	17.85	2.700	21.02	3.940	1.277	13	-0.81	191.30	0
191	Acid Soluble Chromium (ppm)	0368	18.15	0.5000	21.02	3.940	1.277	13	-0.73	191.30	0
191	Acid Soluble Chromium (ppm)	0482	19.40	0.0000	21.02	3.940	1.277	13	-0.41	191.30	0
191	Acid Soluble Chromium (ppm)	0102	20.32	3.315	21.02	3.940	1.277	13	-0.18	191.30	0
191	Acid Soluble Chromium (ppm)	0389	20.35	0.3000	21.02	3.940	1.277	13	-0.17	191.30	0
191	Acid Soluble Chromium (ppm)	0096	22.35	1.500	21.02	3.940	1.277	13	0.34	191.30	0
191	Acid Soluble Chromium (ppm)	0230	22.95	0.7000	21.02	3.940	1.277	13	0.49	191.30	0
191	Acid Soluble Chromium (ppm)	0494	23.38	1.419	21.02	3.940	1.277	13	0.60	191.33	0
191	Acid Soluble Chromium (ppm)	0037	24.08	0.1200	21.02	3.940	1.277	13	0.78	191.33	0
191	Acid Soluble Chromium (ppm)	0452	30.10	0.0200	21.02	3.940	1.277	13	2.30	191.30	0
191	Acid Soluble Chromium (ppm)	0481	35.50	5.000	21.02	3.940	1.277	13	3.67	191.00	0
191	Acid Soluble Chromium (ppm)	0512	0.0000	0.0000	21.02	3.940	1.277	13	-5.34	191.99	4
202	Acid Soluble Cobalt (ppm)	0501	1.505	0.0100	2.722	1.110	0.1396	14	-1.10	202.34	0
202	Acid Soluble Cobalt (ppm)	0368	1.620	0.0400	2.722	1.110	0.1396	14	-0.99	202.30	0
202	Acid Soluble Cobalt (ppm)	0515	1.653	0.0510	2.722	1.110	0.1396	14	-0.96	202.34	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
202	Acid Soluble Cobalt (ppm)	0102	1.719	0.3420	2.722	1.110	0.1396	14	-0.90	202.30	0
202	Acid Soluble Cobalt (ppm)	0035	1.770	0.7600	2.722	1.110	0.1396	14	-0.86	202.30	0
202	Acid Soluble Cobalt (ppm)	0230	2.325	0.1100	2.722	1.110	0.1396	14	-0.36	202.30	0
202	Acid Soluble Cobalt (ppm)	0389	2.450	0.1000	2.722	1.110	0.1396	14	-0.25	202.30	0
202	Acid Soluble Cobalt (ppm)	0095	3.000	0.0000	2.722	1.110	0.1396	14	0.25	202.30	0
202	Acid Soluble Cobalt (ppm)	0452	3.340	0.0200	2.722	1.110	0.1396	14	0.56	202.30	0
202	Acid Soluble Cobalt (ppm)	0482	3.400	0.0000	2.722	1.110	0.1396	14	0.61	202.30	0
202	Acid Soluble Cobalt (ppm)	0096	3.425	0.0700	2.722	1.110	0.1396	14	0.63	202.30	0
202	Acid Soluble Cobalt (ppm)	0494	3.465	0.0550	2.722	1.110	0.1396	14	0.67	202.33	0
202	Acid Soluble Cobalt (ppm)	0494	4.136	0.2712	2.722	1.110	0.1396	14	1.27	202.30	0
202	Acid Soluble Cobalt (ppm)	0037	4.307	0.1250	2.722	1.110	0.1396	14	1.43	202.33	0
202	Acid Soluble Cobalt (ppm)	0512	6.100	6.600	2.722	1.110	0.1396	14	3.04	202.99	1
221	Acid Soluble Copper (%)	0041	0.0001	0.0000	0.0012	0.0004	0.0244	19	-2.66	221.30	0
221	Acid Soluble Copper (%)	0105	0.0006	0.0008	0.0012	0.0004	0.0244	19	-1.49	221.00	0
221	Acid Soluble Copper (%)	0494	0.0009	0.0001	0.0012	0.0004	0.0244	19	-0.90	221.31	0
221	Acid Soluble Copper (%)	0515	0.0009	0.0000	0.0012	0.0004	0.0244	19	-0.78	221.33	0
221	Acid Soluble Copper (%)	0102	0.0010	0.0000	0.0012	0.0004	0.0244	19	-0.54	221.30	0
221	Acid Soluble Copper (%)	0494	0.0011	0.0001	0.0012	0.0004	0.0244	19	-0.42	221.33	0
221	Acid Soluble Copper (%)	0230	0.0011	0.0000	0.0012	0.0004	0.0244	19	-0.31	221.30	0
221	Acid Soluble Copper (%)	0389	0.0011	0.0000	0.0012	0.0004	0.0244	19	-0.31	221.99	0
221	Acid Soluble Copper (%)	0049	0.0012	0.0001	0.0012	0.0004	0.0244	19	-0.19	221.30	0
221	Acid Soluble Copper (%)	0433	0.0012	0.0001	0.0012	0.0004	0.0244	19	-0.19	221.30	0
221	Acid Soluble Copper (%)	0512	0.0012	0.0001	0.0012	0.0004	0.0244	19	-0.19	221.99	0
221	Acid Soluble Copper (%)	0035	0.0012	0.0004	0.0012	0.0004	0.0244	19	-0.07	221.30	0
221	Acid Soluble Copper (%)	0506	0.0014	0.0001	0.0012	0.0004	0.0244	19	0.28	221.99	0
221	Acid Soluble Copper (%)	0043	0.0017	0.0001	0.0012	0.0004	0.0244	19	0.99	221.00	0
221	Acid Soluble Copper (%)	0394	0.0022	0.0001	0.0012	0.0004	0.0244	19	2.17	221.30	0
221	Acid Soluble Copper (%)	0354	0.0050	0.0020	0.0012	0.0004	0.0244	19	8.89	221.30	0
221	Acid Soluble Copper (%)	0402	0.0074	0.0004	0.0012	0.0004	0.0244	19	14.55	221.30	0
221	Acid Soluble Copper (%)	0452	9.230	0.0600	0.0012	0.0004	0.0244	19	21758.23	221.30	0
221	Acid Soluble Copper (%)	0368	12.70	0.4000	0.0012	0.0004	0.0244	19	29939.29	221.30	0
221	Acid Soluble Copper (%)	0096	11.09	0.7200	0.0012	0.0004	0.0244	19	26143.47	221.30	1
221	Acid Soluble Copper (%)	0421	0.0000	0.0000	0.0012	0.0004	0.0244	19	-2.90	221.33	4
241	Acid Soluble Iron (2%)	0508	0.0205*	0.0010	1.818	0.1364	0.0460	56	-13.18	241.99	0
241	Acid Soluble Iron (2%)	0512	0.0436*	0.0007	1.818	0.1364	0.0460	56	-13.01	241.99	0
241	Acid Soluble Iron (2%)	0041	0.9935*	0.0598	1.818	0.1364	0.0460	56	-6.05	241.30	0
241	Acid Soluble Iron (2%)	0515	1.112*	0.0482	1.818	0.1364	0.0460	56	-5.18	241.33	0
241	Acid Soluble Iron (2%)	0516	1.140*	0.1600	1.818	0.1364	0.0460	56	-4.97	241.00	0
241	Acid Soluble Iron (2%)	0513	1.410*	0.0200	1.818	0.1364	0.0460	56	-2.99	241.00	0
241	Acid Soluble Iron (2%)	0472	1.420*	0.0200	1.818	0.1364	0.0460	56	-2.92	241.30	0
241	Acid Soluble Iron (2%)	0482	1.420*	0.1000	1.818	0.1364	0.0460	56	-2.92	241.30	0
241	Acid Soluble Iron (2%)	0481	1.490*	0.0600	1.818	0.1364	0.0460	56	-2.40	241.00	0
241	Acid Soluble Iron (2%)	0389	1.535*	0.0100	1.818	0.1364	0.0460	56	-2.07	241.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
241	Acid Soluble Iron (2%)	0114	1.605*	0.0300	1.818	0.1364	0.0460	56	-1.56	241.30	0
241	Acid Soluble Iron (2%)	0131	1.645	0.0300	1.818	0.1364	0.0460	56	-1.27	241.30	0
241	Acid Soluble Iron (2%)	0291	1.700	0.1000	1.818	0.1364	0.0460	56	-0.86	241.30	0
241	Acid Soluble Iron (2%)	0485	1.705	0.0500	1.818	0.1364	0.0460	56	-0.83	241.00	0
241	Acid Soluble Iron (2%)	0452	1.735	0.0100	1.818	0.1364	0.0460	56	-0.61	241.30	0
241	Acid Soluble Iron (2%)	0368	1.747	0.0735	1.818	0.1364	0.0460	56	-0.52	241.30	0
241	Acid Soluble Iron (2%)	0230	1.750	0.0000	1.818	0.1364	0.0460	56	-0.50	241.30	0
241	Acid Soluble Iron (2%)	0433	1.772	0.0110	1.818	0.1364	0.0460	56	-0.34	241.30	0
241	Acid Soluble Iron (2%)	0043	1.775	0.0700	1.818	0.1364	0.0460	56	-0.31	241.00	0
241	Acid Soluble Iron (2%)	0494	1.784	0.0351	1.818	0.1364	0.0460	56	-0.25	241.31	0
241	Acid Soluble Iron (2%)	0501	1.785	0.0100	1.818	0.1364	0.0460	56	-0.24	241.99	0
241	Acid Soluble Iron (2%)	0258	1.790	0.0800	1.818	0.1364	0.0460	56	-0.20	241.00	0
241	Acid Soluble Iron (2%)	0351	1.791	0.0158	1.818	0.1364	0.0460	56	-0.20	241.30	0
241	Acid Soluble Iron (2%)	0102	1.799	0.0620	1.818	0.1364	0.0460	56	-0.14	241.30	0
241	Acid Soluble Iron (2%)	0095	1.800	0.0000	1.818	0.1364	0.0460	56	-0.13	241.30	0
241	Acid Soluble Iron (2%)	0177	1.809	0.0307	1.818	0.1364	0.0460	56	-0.07	241.33	0
241	Acid Soluble Iron (2%)	0233	1.809	0.1240	1.818	0.1364	0.0460	56	-0.06	241.30	0
241	Acid Soluble Iron (2%)	0049	1.830	0.0000	1.818	0.1364	0.0460	56	0.09	241.30	0
241	Acid Soluble Iron (2%)	0402	1.840	0.0100	1.818	0.1364	0.0460	56	0.16	241.30	0
241	Acid Soluble Iron (2%)	0421	1.850	0.1000	1.818	0.1364	0.0460	56	0.24	241.33	0
241	Acid Soluble Iron (2%)	0494	1.864	0.0770	1.818	0.1364	0.0460	56	0.34	241.33	0
241	Acid Soluble Iron (2%)	0157	1.865	0.0300	1.818	0.1364	0.0460	56	0.35	241.30	0
241	Acid Soluble Iron (2%)	0390	1.865	0.0900	1.818	0.1364	0.0460	56	0.35	241.30	0
241	Acid Soluble Iron (2%)	0231	1.865	0.0100	1.818	0.1364	0.0460	56	0.35	241.30	0
241	Acid Soluble Iron (2%)	0498	1.870	0.0000	1.818	0.1364	0.0460	56	0.38	241.00	0
241	Acid Soluble Iron (2%)	0096	1.880	0.0200	1.818	0.1364	0.0460	56	0.46	241.30	0
241	Acid Soluble Iron (2%)	0371	1.880	0.0200	1.818	0.1364	0.0460	56	0.46	241.30	0
241	Acid Soluble Iron (2%)	0486	1.880	0.0400	1.818	0.1364	0.0460	56	0.46	241.33	0
241	Acid Soluble Iron (2%)	0506	1.880	0.1000	1.818	0.1364	0.0460	56	0.46	241.99	0
241	Acid Soluble Iron (2%)	0037	1.894	0.0050	1.818	0.1364	0.0460	56	0.55	241.33	0
241	Acid Soluble Iron (2%)	0105	1.895	0.1270	1.818	0.1364	0.0460	56	0.56	241.00	0
241	Acid Soluble Iron (2%)	0040	1.895	0.0300	1.818	0.1364	0.0460	56	0.57	241.00	0
241	Acid Soluble Iron (2%)	0234	1.920	0.0200	1.818	0.1364	0.0460	56	0.75	241.30	0
241	Acid Soluble Iron (2%)	0354	1.922	0.0260	1.818	0.1364	0.0460	56	0.76	241.30	0
241	Acid Soluble Iron (2%)	0025	1.934	0.0200	1.818	0.1364	0.0460	56	0.85	241.00	0
241	Acid Soluble Iron (2%)	0360	1.940	0.0200	1.818	0.1364	0.0460	56	0.90	241.30	0
241	Acid Soluble Iron (2%)	0394	1.940	0.1120	1.818	0.1364	0.0460	56	0.90	241.30	0
241	Acid Soluble Iron (2%)	0169	1.945	0.0300	1.818	0.1364	0.0460	56	0.93	241.00	0
241	Acid Soluble Iron (2%)	0055	1.953	0.0950	1.818	0.1364	0.0460	56	0.99	241.30	0
241	Acid Soluble Iron (2%)	0457	1.968	0.0980	1.818	0.1364	0.0460	56	1.10	241.00	0
241	Acid Soluble Iron (2%)	0136	1.970	0.0000	1.818	0.1364	0.0460	56	1.12	241.03	0
241	Acid Soluble Iron (2%)	0023	1.971	0.0980	1.818	0.1364	0.0460	56	1.12	241.99	0
241	Acid Soluble Iron (2%)	0029	1.981	0.0500	1.818	0.1364	0.0460	56	1.20	241.00	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
241	Acid Soluble Iron (2%)	0483	2.065	0.0100	1.818	0.1364	0.0460	56	1.81	241.30	0
241	Acid Soluble Iron (2%)	0324	2.085	0.0300	1.818	0.1364	0.0460	56	1.96	241.30	0
241	Acid Soluble Iron (2%)	0027	2.108	0.0980	1.818	0.1364	0.0460	56	2.13	241.30	0
241	Acid Soluble Iron (2%)	0035	1.560*	0.2600	1.818	0.1364	0.0460	56	-1.89	241.30	1
251	Acid Soluble Lead (ppm)	0501	0.3150	0.1100	1.366	1.032	0.1575	11	-1.02	251.34	0
251	Acid Soluble Lead (ppm)	0494	0.3947	0.0858	1.366	1.032	0.1575	11	-0.94	251.33	0
251	Acid Soluble Lead (ppm)	0230	0.5850	0.0080	1.366	1.032	0.1575	11	-0.76	251.30	0
251	Acid Soluble Lead (ppm)	0394	0.6500	0.0000	1.366	1.032	0.1575	11	-0.69	251.30	0
251	Acid Soluble Lead (ppm)	0368	0.8590	0.1300	1.366	1.032	0.1575	11	-0.49	251.30	0
251	Acid Soluble Lead (ppm)	0452	1.065	0.0500	1.366	1.032	0.1575	11	-0.29	251.30	0
251	Acid Soluble Lead (ppm)	0096	1.400	0.2000	1.366	1.032	0.1575	11	0.03	251.30	0
251	Acid Soluble Lead (ppm)	0035	2.085	0.3100	1.366	1.032	0.1575	11	0.70	251.30	0
251	Acid Soluble Lead (ppm)	0415	2.840	0.3200	1.366	1.032	0.1575	11	1.43	251.99	0
251	Acid Soluble Lead (ppm)	0389	3.100	0.2000	1.366	1.032	0.1575	11	1.68	251.30	0
251	Acid Soluble Lead (ppm)	0515	9.051	0.3190	1.366	1.032	0.1575	11	7.45	251.34	0
251	Acid Soluble Lead (ppm)	0512	26.05	52.10	1.366	1.032	0.1575	11	23.91	251.99	4
261	Acid Soluble Manganese (%)	0389	0.0087	0.0003	0.0100	0.0007	0.0004	17	-1.86	261.99	0
261	Acid Soluble Manganese (%)	0049	0.0090	0.0004	0.0100	0.0007	0.0004	17	-1.38	261.32	0
261	Acid Soluble Manganese (%)	0035	0.0094	0.0009	0.0100	0.0007	0.0004	17	-0.90	261.30	0
261	Acid Soluble Manganese (%)	0102	0.0095	0.0010	0.0100	0.0007	0.0004	17	-0.69	261.30	0
261	Acid Soluble Manganese (%)	0501	0.0095	0.0004	0.0100	0.0007	0.0004	17	-0.69	261.99	0
261	Acid Soluble Manganese (%)	0351	0.0097	0.0002	0.0100	0.0007	0.0004	17	-0.41	261.30	0
261	Acid Soluble Manganese (%)	0105	0.0100	0.0002	0.0100	0.0007	0.0004	17	0.00	261.12	0
261	Acid Soluble Manganese (%)	0472	0.0100	0.0000	0.0100	0.0007	0.0004	17	0.00	261.30	0
261	Acid Soluble Manganese (%)	0482	0.0100	0.0000	0.0100	0.0007	0.0004	17	0.00	261.31	0
261	Acid Soluble Manganese (%)	0055	0.0100	0.0000	0.0100	0.0007	0.0004	17	0.00	261.32	0
261	Acid Soluble Manganese (%)	0421	0.0100	0.0000	0.0100	0.0007	0.0004	17	0.00	261.35	0
261	Acid Soluble Manganese (%)	0043	0.0103	0.0006	0.0100	0.0007	0.0004	17	0.41	261.00	0
261	Acid Soluble Manganese (%)	0494	0.0104	0.0006	0.0100	0.0007	0.0004	17	0.55	261.31	0
261	Acid Soluble Manganese (%)	0354	0.0105	0.0010	0.0100	0.0007	0.0004	17	0.69	261.30	0
261	Acid Soluble Manganese (%)	0494	0.0108	0.0005	0.0100	0.0007	0.0004	17	1.03	261.35	0
261	Acid Soluble Manganese (%)	0390	0.0110	0.0000	0.0100	0.0007	0.0004	17	1.38	261.30	0
261	Acid Soluble Manganese (%)	0041	0.0304	0.0008	0.0100	0.0007	0.0004	17	28.12	261.30	0
261	Acid Soluble Manganese (%)	0096	106.2	1.100	0.0100	0.0007	0.0004	17	146295.81	261.30	2
281	Acid Soluble Mercury (ppm)	0394	0.0072	0.0007	0.0636	0.0798	0.0204	2	-0.71	281.30	0
281	Acid Soluble Mercury (ppm)	0501	0.1200	0.0400	0.0636	0.0798	0.0204	2	0.71	281.30	0
281	Acid Soluble Mercury (ppm)	0230	0.0000	0.0000	0.0636	0.0798	0.0204	2	-0.80	281.00	4
281	Acid Soluble Mercury (ppm)	0515	0.0252	0.0504	0.0636	0.0798	0.0204	2	-0.48	281.30	4
289	Acid Soluble Molybdenum (ppm)	0501	1.775	0.1900	2.403	0.2624	0.1583	12	-2.40	289.34	0
289	Acid Soluble Molybdenum (ppm)	0515	1.946	0.0520	2.403	0.2624	0.1583	12	-1.74	289.34	0
289	Acid Soluble Molybdenum (ppm)	0394	2.000	0.0000	2.403	0.2624	0.1583	12	-1.54	289.30	0
289	Acid Soluble Molybdenum (ppm)	0102	2.210	0.3740	2.403	0.2624	0.1583	12	-0.74	289.30	0
289	Acid Soluble Molybdenum (ppm)	0494	2.384	0.1107	2.403	0.2624	0.1583	12	-0.08	289.30	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
289	Acid Soluble Molybdenum (ppm)	0368	2.440	0.3400	2.403	0.2624	0.1583	12	0.14	289.30	0
289	Acid Soluble Molybdenum (ppm)	0035	2.450	0.0400	2.403	0.2624	0.1583	12	0.18	289.30	0
289	Acid Soluble Molybdenum (ppm)	0433	2.458	0.1060	2.403	0.2624	0.1583	12	0.21	289.30	0
289	Acid Soluble Molybdenum (ppm)	0096	2.500	0.6000	2.403	0.2624	0.1583	12	0.37	289.30	0
289	Acid Soluble Molybdenum (ppm)	0452	2.505	0.0500	2.403	0.2624	0.1583	12	0.39	289.30	0
289	Acid Soluble Molybdenum (ppm)	0230	2.805	0.0100	2.403	0.2624	0.1583	12	1.53	289.30	0
289	Acid Soluble Molybdenum (ppm)	0494	2.920	0.0270	2.403	0.2624	0.1583	12	1.97	289.33	0
289	Acid Soluble Molybdenum (ppm)	0095	1.500	1.000	2.403	0.2624	0.1583	12	-3.44	289.30	1
291	Acid Soluble Nickel (ppm)	0512	4.800	1.800	9.113	1.434	0.5119	16	-3.01	291.99	0
291	Acid Soluble Nickel (ppm)	0501	5.040	0.9400	9.113	1.434	0.5119	16	-2.84	291.34	0
291	Acid Soluble Nickel (ppm)	0368	6.965	0.3700	9.113	1.434	0.5119	16	-1.50	291.30	0
291	Acid Soluble Nickel (ppm)	0515	7.742	0.3540	9.113	1.434	0.5119	16	-0.96	291.34	0
291	Acid Soluble Nickel (ppm)	0482	7.800	0.2000	9.113	1.434	0.5119	16	-0.92	291.30	0
291	Acid Soluble Nickel (ppm)	0394	8.800	0.6000	9.113	1.434	0.5119	16	-0.22	291.30	0
291	Acid Soluble Nickel (ppm)	0095	9.000	0.0000	9.113	1.434	0.5119	16	-0.08	291.30	0
291	Acid Soluble Nickel (ppm)	0102	9.337	1.042	9.113	1.434	0.5119	16	0.16	291.30	0
291	Acid Soluble Nickel (ppm)	0096	9.350	0.7000	9.113	1.434	0.5119	16	0.17	291.30	0
291	Acid Soluble Nickel (ppm)	0136	9.550	0.1000	9.113	1.434	0.5119	16	0.30	291.00	0
291	Acid Soluble Nickel (ppm)	0230	9.570	0.0000	9.113	1.434	0.5119	16	0.32	291.30	0
291	Acid Soluble Nickel (ppm)	0233	9.875	0.0430	9.113	1.434	0.5119	16	0.53	291.32	0
291	Acid Soluble Nickel (ppm)	0494	10.22	0.6413	9.113	1.434	0.5119	16	0.77	291.33	0
291	Acid Soluble Nickel (ppm)	0452	10.23	0.0100	9.113	1.434	0.5119	16	0.78	291.30	0
291	Acid Soluble Nickel (ppm)	0037	10.91	0.3900	9.113	1.434	0.5119	16	1.25	291.33	0
291	Acid Soluble Nickel (ppm)	0481	29.50	1.000	9.113	1.434	0.5119	16	14.22	291.00	0
291	Acid Soluble Nickel (ppm)	0035	8.800	2.600	9.113	1.434	0.5119	16	-0.22	291.30	1
301	Acid Soluble Selenium (ppm)	0230	0.2830	0.1480	1.963	2.681	0.2593	3	-0.63	301.30	0
301	Acid Soluble Selenium (ppm)	0501	0.5500	0.0800	1.963	2.681	0.2593	3	-0.53	301.34	0
301	Acid Soluble Selenium (ppm)	0368	5.055	0.5500	1.963	2.681	0.2593	3	1.15	301.30	0
301	Acid Soluble Selenium (ppm)	0515	0.0000	0.0000	1.963	2.681	0.2593	3	-0.73	301.34	4
311	Sodium (%)	0482	0.0100	0.0000	0.0197	0.0088	0.0064	7	-1.10	311.99	0
311	Sodium (%)	0494	0.0139	0.0002	0.0197	0.0088	0.0064	7	-0.65	311.33	0
311	Sodium (%)	0096	0.0150	0.0100	0.0197	0.0088	0.0064	7	-0.53	311.99	0
311	Sodium (%)	0494	0.0155	0.0008	0.0197	0.0088	0.0064	7	-0.47	311.99	0
311	Sodium (%)	0035	0.0325	0.0090	0.0197	0.0088	0.0064	7	1.46	311.99	0
311	Sodium (%)	0354	0.0585	0.0150	0.0197	0.0088	0.0064	7	4.42	311.99	0
311	Sodium (%)	0510	0.2950	0.0100	0.0197	0.0088	0.0064	7	31.30	311.30	0
321	Acid Soluble Zinc (%)	0501	0.0002	0.0000	0.0012	0.0009	0.0202	18	-1.04	321.99	0
321	Acid Soluble Zinc (%)	0494	0.0003	0.0000	0.0012	0.0009	0.0202	18	-0.93	321.31	0
321	Acid Soluble Zinc (%)	0389	0.0004	0.0001	0.0012	0.0009	0.0202	18	-0.88	321.99	0
321	Acid Soluble Zinc (%)	0515	0.0004	0.0002	0.0012	0.0009	0.0202	18	-0.83	321.33	0
321	Acid Soluble Zinc (%)	0394	0.0004	0.0000	0.0012	0.0009	0.0202	18	-0.83	321.30	0
321	Acid Soluble Zinc (%)	0230	0.0005	0.0001	0.0012	0.0009	0.0202	18	-0.77	321.30	0
321	Acid Soluble Zinc (%)	0428	0.0005	0.0000	0.0012	0.0009	0.0202	18	-0.72	321.00	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
321	Acid Soluble Zinc (%)	0102	0.0005	0.0000	0.0012	0.0009	0.0202	18	-0.72	321.30	0
321	Acid Soluble Zinc (%)	0035	0.0009	0.0005	0.0012	0.0009	0.0202	18	-0.34	321.30	0
321	Acid Soluble Zinc (%)	0043	0.0009	0.0002	0.0012	0.0009	0.0202	18	-0.29	321.00	0
321	Acid Soluble Zinc (%)	0512	0.0015	0.0013	0.0012	0.0009	0.0202	18	0.31	321.99	0
321	Acid Soluble Zinc (%)	0433	0.0018	0.0003	0.0012	0.0009	0.0202	18	0.63	321.30	0
321	Acid Soluble Zinc (%)	0354	0.0025	0.0010	0.0012	0.0009	0.0202	18	1.44	321.30	0
321	Acid Soluble Zinc (%)	0402	0.0121	0.0025	0.0012	0.0009	0.0202	18	11.74	321.30	0
321	Acid Soluble Zinc (%)	0041	1.288	0.2175	0.0012	0.0009	0.0202	18	1387.25	321.30	0
321	Acid Soluble Zinc (%)	0452	3.805	0.0700	0.0012	0.0009	0.0202	18	4101.15	321.30	0
321	Acid Soluble Zinc (%)	0292	8.065	0.0700	0.0012	0.0009	0.0202	18	8694.12	321.30	0
321	Acid Soluble Zinc (%)	0096	13.70	0.0000	0.0012	0.0009	0.0202	18	14769.57	321.30	0
321	Acid Soluble Zinc (%)	0368	8.580	9.640	0.0012	0.0009	0.0202	18	9249.38	321.30	1
321	Acid Soluble Zinc (%)	0421	0.0000	0.0000	0.0012	0.0009	0.0202	18	-1.26	321.33	4

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 and a 4 flag indicates rejected due to 0 value submitted. Robust statistics not used if < 6 labs reporting, in this case the Z Scores are included for information only (Grey). An offset lab value with an asterisk indicates that the value is lower than the Analyte value less the IA. Method or Analyte 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.