

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Analyte Proficiency From All Labs

Sample # 180711

Micronutrients

Statistical Summary

Analytes: 31

Labs Reporting: 90

Issue Date : 08/31/2018

Analyte Code	Analyte Sample # 180711	# 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	Analyte IA Ratio	Average Range (R-bar)	Honwitz %RSD
001	Ammoniacal Nitrogen (%)	1		0.9650									
010	Total Nitrogen (%)	9	8	1.402	0.0717	1.386	0.4900	0.0363	0.0160	2.62%	0.17	0.0234	3.81%
020	Total Phosphorus as P2O5 (%)	10	8	4.326	1.050	4.501		0.7318	0.3234	16.26%		0.0958	3.19%
041	Direct Available Phosphorus as P2O5 (%)	4	4	4.754	0.3329	4.754	0.6700	0.3329	0.2081	7.00%	1.16	0.1925	3.16%
050	Soluble Potassium as K2O (%)	12	11	1.379	0.1847	1.381	0.4100	0.2048	0.0772	14.83%	1.16	0.0968	3.81%
060	Water (Free) (%)	1		7.430									
101	Acid Soluble Calcium (%)	23	22	0.9738	0.1262	0.9562	0.2478	0.0987	0.0263	10.32%	0.93	0.0291	4.03%
121	Acid Soluble Magnesium (%)	22	22	0.2774	0.0414	0.2778	0.2139	0.0329	0.0088	11.85%	0.36	0.0172	4.85%
143	Elemental Sulfur (%)	3	3	7.642	0.2430	7.642		0.2430	0.1754	3.18%		0.1120	2.95%
145	Sulfate Sulfur, HCl soluble (%)	12	12	6.986	0.8387	7.004		0.8412	0.3035	12.01%		0.1199	2.98%
146	Total Sulfur in Liquid (5%)	1		8.320									
148	Total Sulfur (5%)	49	48	7.423	0.7538	7.442	0.5721	0.6775	0.1222	9.10%	2.76	0.1656	2.96%
149	Sulfur - HNO3 soluble (%)	6	6	7.191	1.390	7.191		1.576	0.8041	21.91%		0.0281	2.97%
151	Acid Soluble Arsenic (ppm)	20	18	10.31	4.640	10.38		4.483	1.321	43.19%		1.226	11.25%
165	Acid Soluble Boron (1%)	60	59	1.270	0.1496	1.271	0.1936	0.1444	0.0235	11.36%	1.74	0.0316	3.86%
171	Water Soluble Boron (%)	9	9	1.050	0.2098	1.030		0.1559	0.0649	15.13%		0.0356	3.98%
181	Acid Soluble Cadmium (ppm)	27	25	554.1	71.23	553.1		76.29	19.07	13.79%		20.35	6.18%
191	Acid Soluble Chromium (ppm)	23	23	208.5	38.61	208.6		43.68	11.39	20.95%		15.96	7.16%
202	Acid Soluble Cobalt (ppm)	25	24	214.8	26.89	216.9	66.0688	25.04	6.388	11.54%	0.88	9.235	7.12%
221	Acid Soluble Copper (1%)	75	73	0.9036	0.0853	0.8981	0.0948	0.0750	0.0110	8.35%	1.84	0.0270	4.06%
241	Acid Soluble Iron (%)	27	26	2.072	0.1654	2.072	0.2122	0.1638	0.0402	7.90%	1.80	0.0751	3.58%
251	Acid Soluble Lead (ppm)	26	25	573.5	85.44	579.4		81.69	20.42	14.10%		21.44	6.14%
261	Acid Soluble Manganese (5%)	74	72	8.274	1.402	8.393	0.8443	1.289	0.1899	15.36%	3.56	0.1866	2.90%
271	Water Soluble Manganese (%)	1		1.440									
281	Acid Soluble Mercury (ppm)	10	9	9.838	11.59	9.497		12.37	5.154	130.25%		0.3887	11.40%
289	Acid Soluble Molybdenum (ppm)	28	28	350.7	125.7	367.1	111.1284	47.62	11.25	12.97%	1.00	13.14	6.58%
291	Acid Soluble Nickel (ppm)	28	27	1,701	199.7	1,700		216.6	52.11	12.74%		67.77	5.22%
301	Acid Soluble Selenium (ppm)	19	17	25.59	24.40	25.36		27.20	8.245	107.23%		2.781	9.83%
311	Sodium (%)	13	13	1.055	0.0569	1.057	0.1107	0.0613	0.0213	5.80%	1.29	0.0429	3.97%
321	Acid Soluble Zinc (20%)	80	77	19.97	1.785	20.05	1.0000	1.172	0.1669	5.84%	2.73	0.4111	2.55%
325	Water Soluble Zinc (%)	3	3	11.53	7.336	11.53		7.336	5.294	63.64%		0.2600	2.77%

Analyte Code	Analyte Sample # 180711	# Tests in Robust Calculations	# Tests Submitted	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	Analyte IA Ratio	Average Range (R-bar)	Howitz %RSD
--------------	----------------------------	--------------------------------	-------------------	----------	--------	-------------------------------	---------------------	-----------	------------------------	--------------	------------------	-----------------------	-------------

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

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Analyte Proficiency From All Labs

Analytes: 31

Sample # 180711

Lab Values

Labs Reporting: 90

Micronutrients

Issue Date : 08/31/2018

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 (%)	0524	0.9650	0.0500				1		001.99	0
010	Total Nitrogen (%)	0521	1.342	0.0000	1.386	0.0363	0.0234	8	-1.12	010.60	0
010	Total Nitrogen (%)	0105	1.350	0.0200	1.386	0.0363	0.0234	8	-0.91	010.11	0
010	Total Nitrogen (%)	0389	1.370	0.0200	1.386	0.0363	0.0234	8	-0.40	010.60	0
010	Total Nitrogen (%)	0105	1.385	0.0100	1.386	0.0363	0.0234	8	-0.03	010.60	0
010	Total Nitrogen (%)	0354	1.395	0.0100	1.386	0.0363	0.0234	8	0.23	010.60	0
010	Total Nitrogen (%)	0325	1.400	0.0200	1.386	0.0363	0.0234	8	0.35	010.60	0
010	Total Nitrogen (%)	0524	1.406	0.0471	1.386	0.0363	0.0234	8	0.51	010.99	0
010	Total Nitrogen (%)	0472	1.570	0.0600	1.386	0.0363	0.0234	8	4.63	010.60	0
010	Total Nitrogen (%)	0482	1.300	0.2000	1.386	0.0363	0.0234	8	-2.17	010.60	1
020	Total Phosphorus as P2O5 (%)	0389	2.000	0.0000	4.501	0.7318	0.0958	8	-3.13	020.50	0
020	Total Phosphorus as P2O5 (%)	0482	3.705	0.1900	4.501	0.7318	0.0958	8	-1.00	020.50	0
020	Total Phosphorus as P2O5 (%)	0524	4.466	0.0731	4.501	0.7318	0.0958	8	-0.04	020.50	0
020	Total Phosphorus as P2O5 (%)	0521	4.525	0.0000	4.501	0.7318	0.0958	8	0.03	020.50	0
020	Total Phosphorus as P2O5 (%)	0472	4.665	0.0300	4.501	0.7318	0.0958	8	0.20	020.50	0
020	Total Phosphorus as P2O5 (%)	0025	4.925	0.2130	4.501	0.7318	0.0958	8	0.53	020.50	0
020	Total Phosphorus as P2O5 (%)	0483	5.145	0.2500	4.501	0.7318	0.0958	8	0.80	020.50	0
020	Total Phosphorus as P2O5 (%)	0527	5.175	0.0100	4.501	0.7318	0.0958	8	0.84	020.50	0
020	Total Phosphorus as P2O5 (%)	0515	6.039	1.474	4.501	0.7318	0.0958	8	1.92	020.99	1
020	Total Phosphorus as P2O5 (%)	0552	0.0000	0.0000	4.501	0.7318	0.0958	8		020.50	4
041	Direct Available Phosphorus as P2O5 (%)	0472	4.470	0.0000	4.754	0.3329	0.1925	4	-0.85	041.60	0
041	Direct Available Phosphorus as P2O5 (%)	0325	4.600	0.4000	4.754	0.3329	0.1925	4	-0.46	041.50	0
041	Direct Available Phosphorus as P2O5 (%)	0185	4.715	0.1300	4.754	0.3329	0.1925	4	-0.12	041.11	0
041	Direct Available Phosphorus as P2O5 (%)	0354	5.230	0.2400	4.754	0.3329	0.1925	4	1.43	041.60	0
050	Soluble Potassium as K2O (%)	0325	1.050	0.3000	1.381	0.2048	0.0968	11	-1.62	050.99	0
050	Soluble Potassium as K2O (%)	0527	1.145	0.1100	1.381	0.2048	0.0968	11	-1.15	050.99	0
050	Soluble Potassium as K2O (%)	0472	1.300	0.0000	1.381	0.2048	0.0968	11	-0.39	050.31	0
050	Soluble Potassium as K2O (%)	0185	1.315	0.0900	1.381	0.2048	0.0968	11	-0.32	050.32	0
050	Soluble Potassium as K2O (%)	0521	1.351	0.0000	1.381	0.2048	0.0968	11	-0.15	050.99	0
050	Soluble Potassium as K2O (%)	0025	1.398	0.0920	1.381	0.2048	0.0968	11	0.08	050.99	0
050	Soluble Potassium as K2O (%)	0482	1.400	0.0600	1.381	0.2048	0.0968	11	0.09	050.99	0
050	Soluble Potassium as K2O (%)	0524	1.405	0.0245	1.381	0.2048	0.0968	11	0.12	050.99	0
050	Soluble Potassium as K2O (%)	0483	1.495	0.1900	1.381	0.2048	0.0968	11	0.56	050.51	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 (%)	0423	1.627	0.0180	1.381	0.2048	0.0968	11	1.20	050.52	0
050	Soluble Potassium as K2O (%)	0354	1.680	0.1800	1.381	0.2048	0.0968	11	1.46	050.52	0
050	Soluble Potassium as K2O (%)	0552	0.0000	0.0000	1.381	0.2048	0.0968	11		050.99	4
060	Water (Free) (%)	0518	7.430	0.3400				1		060.30	0
101	Acid Soluble Calcium (%)	0389	0.8250	0.0100	0.9562	0.0987	0.0291	22	-1.33	101.99	0
101	Acid Soluble Calcium (%)	0472	0.8450	0.0100	0.9562	0.0987	0.0291	22	-1.13	101.30	0
101	Acid Soluble Calcium (%)	0493	0.8600	0.0200	0.9562	0.0987	0.0291	22	-0.98	101.33	0
101	Acid Soluble Calcium (%)	0482	0.8650	0.0500	0.9562	0.0987	0.0291	22	-0.92	101.30	0
101	Acid Soluble Calcium (%)	0106	0.8748	0.0437	0.9562	0.0987	0.0291	22	-0.83	101.33	0
101	Acid Soluble Calcium (%)	0096	0.8938	0.0165	0.9562	0.0987	0.0291	22	-0.63	101.30	0
101	Acid Soluble Calcium (%)	0086	0.8996	0.0664	0.9562	0.0987	0.0291	22	-0.57	101.33	0
101	Acid Soluble Calcium (%)	0494	0.9005	0.0355	0.9562	0.0987	0.0291	22	-0.57	101.33	0
101	Acid Soluble Calcium (%)	0049	0.9078	0.0158	0.9562	0.0987	0.0291	22	-0.49	101.30	0
101	Acid Soluble Calcium (%)	0117	0.9169	0.0262	0.9562	0.0987	0.0291	22	-0.40	101.33	0
101	Acid Soluble Calcium (%)	0105	0.9545	0.0170	0.9562	0.0987	0.0291	22	-0.02	101.00	0
101	Acid Soluble Calcium (%)	0035	0.9575	0.0370	0.9562	0.0987	0.0291	22	0.01	101.30	0
101	Acid Soluble Calcium (%)	0055	0.9600	0.0200	0.9562	0.0987	0.0291	22	0.04	101.33	0
101	Acid Soluble Calcium (%)	0025	0.9629	0.0323	0.9562	0.0987	0.0291	22	0.07	101.33	0
101	Acid Soluble Calcium (%)	0354	0.9650	0.0100	0.9562	0.0987	0.0291	22	0.09	101.30	0
101	Acid Soluble Calcium (%)	0546	1.016	0.0040	0.9562	0.0987	0.0291	22	0.61	101.33	0
101	Acid Soluble Calcium (%)	0527	1.025	0.0300	0.9562	0.0987	0.0291	22	0.70	101.33	0
101	Acid Soluble Calcium (%)	0423	1.035	0.0160	0.9562	0.0987	0.0291	22	0.80	101.32	0
101	Acid Soluble Calcium (%)	0521	1.060	0.0000	0.9562	0.0987	0.0291	22	1.05	101.32	0
101	Acid Soluble Calcium (%)	0483	1.165	0.0300	0.9562	0.0987	0.0291	22	2.12	101.30	0
101	Acid Soluble Calcium (%)	0402	1.195	0.0100	0.9562	0.0987	0.0291	22	2.42	101.30	0
101	Acid Soluble Calcium (%)	0552	1.340	0.1400	0.9562	0.0987	0.0291	22	3.89	101.99	0
101	Acid Soluble Calcium (%)	0041	0.9700	0.1600	0.9562	0.0987	0.0291	22	0.14	101.30	1
121	Acid Soluble Magnesium (%)	0524	0.1789	0.0001	0.2778	0.0329	0.0172	22	-3.00	121.99	0
121	Acid Soluble Magnesium (%)	0105	0.2115	0.0090	0.2778	0.0329	0.0172	22	-2.01	121.00	0
121	Acid Soluble Magnesium (%)	0041	0.2400	0.0200	0.2778	0.0329	0.0172	22	-1.15	121.30	0
121	Acid Soluble Magnesium (%)	0354	0.2450	0.0500	0.2778	0.0329	0.0172	22	-1.00	121.30	0
121	Acid Soluble Magnesium (%)	0035	0.2470	0.0100	0.2778	0.0329	0.0172	22	-0.93	121.30	0
121	Acid Soluble Magnesium (%)	0515	0.2595	0.0081	0.2778	0.0329	0.0172	22	-0.56	121.99	0
121	Acid Soluble Magnesium (%)	0472	0.2600	0.0200	0.2778	0.0329	0.0172	22	-0.54	121.30	0
121	Acid Soluble Magnesium (%)	0482	0.2600	0.0200	0.2778	0.0329	0.0172	22	-0.54	121.30	0
121	Acid Soluble Magnesium (%)	0423	0.2785	0.0010	0.2778	0.0329	0.0172	22	0.02	121.32	0
121	Acid Soluble Magnesium (%)	0096	0.2800	0.0000	0.2778	0.0329	0.0172	22	0.07	121.30	0
121	Acid Soluble Magnesium (%)	0527	0.2800	0.0200	0.2778	0.0329	0.0172	22	0.07	121.33	0
121	Acid Soluble Magnesium (%)	0494	0.2803	0.0154	0.2778	0.0329	0.0172	22	0.08	121.33	0
121	Acid Soluble Magnesium (%)	0086	0.2826	0.0123	0.2778	0.0329	0.0172	22	0.14	121.33	0
121	Acid Soluble Magnesium (%)	0521	0.2855	0.0000	0.2778	0.0329	0.0172	22	0.23	121.32	0
121	Acid Soluble Magnesium (%)	0106	0.2889	0.0222	0.2778	0.0329	0.0172	22	0.34	121.33	0
121	Acid Soluble Magnesium (%)	0049	0.2905	0.0300	0.2778	0.0329	0.0172	22	0.39	121.30	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				
121	Acid Soluble Magnesium (%)	0493	0.3000	0.0200	0.2778	0.0329	0.0172	22	0.67	121.33	0
121	Acid Soluble Magnesium (%)	0117	0.3006	0.0229	0.2778	0.0329	0.0172	22	0.69	121.33	0
121	Acid Soluble Magnesium (%)	0389	0.3100	0.0200	0.2778	0.0329	0.0172	22	0.98	121.99	0
121	Acid Soluble Magnesium (%)	0515	0.3139	0.0064	0.2778	0.0329	0.0172	22	1.10	121.33	0
121	Acid Soluble Magnesium (%)	0483	0.3250	0.0200	0.2778	0.0329	0.0172	22	1.43	121.30	0
121	Acid Soluble Magnesium (%)	0552	0.3850	0.0500	0.2778	0.0329	0.0172	22	3.26	121.99	0
143	Elemental Sulfur (%)	0472	7.370	0.0200	7.642	0.2430	0.1120	3	-1.12	143.99	0
143	Elemental Sulfur (%)	0255	7.717	0.0730	7.642	0.2430	0.1120	3	0.31	143.99	0
143	Elemental Sulfur (%)	0390	7.839	0.2430	7.642	0.2430	0.1120	3	0.81	143.99	0
145	Sulfate Sulfur, HCl soluble (%)	0498	5.340	0.2000	7.004	0.8412	0.1199	12	-1.98	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0444	6.175	0.2300	7.004	0.8412	0.1199	12	-0.99	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0444	6.430	0.0600	7.004	0.8412	0.1199	12	-0.68	145.99	0
145	Sulfate Sulfur, HCl soluble (%)	0405	6.445	0.0700	7.004	0.8412	0.1199	12	-0.66	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0522	6.628	0.0350	7.004	0.8412	0.1199	12	-0.45	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0544	6.965	0.0300	7.004	0.8412	0.1199	12	-0.05	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0106	7.190	0.0600	7.004	0.8412	0.1199	12	0.22	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0550	7.320	0.0800	7.004	0.8412	0.1199	12	0.38	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0518	7.400	0.4000	7.004	0.8412	0.1199	12	0.47	145.99	0
145	Sulfate Sulfur, HCl soluble (%)	0027	7.690	0.0800	7.004	0.8412	0.1199	12	0.82	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0485	7.799	0.0441	7.004	0.8412	0.1199	12	0.95	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0169	8.455	0.1500	7.004	0.8412	0.1199	12	1.72	145.99	0
146	Total Sulfur in Liquid (5%)	0220	8.320±	0.1000				1		146.00	0
148	Total Sulfur (5%)	0506	5.365†	0.3700	7.442	0.6775	0.1656	48	-3.07	148.99	0
148	Total Sulfur (5%)	0527	5.435†	0.3500	7.442	0.6775	0.1656	48	-2.96	148.07	0
148	Total Sulfur (5%)	0486	6.295†	0.0900	7.442	0.6775	0.1656	48	-1.69	148.07	0
148	Total Sulfur (5%)	0541	6.390†	0.8200	7.442	0.6775	0.1656	48	-1.55	148.99	0
148	Total Sulfur (5%)	0307	6.475†	0.0960	7.442	0.6775	0.1656	48	-1.43	148.99	0
148	Total Sulfur (5%)	0515	6.667†	0.1415	7.442	0.6775	0.1656	48	-1.14	148.07	0
148	Total Sulfur (5%)	0542	6.687†	0.0700	7.442	0.6775	0.1656	48	-1.11	148.07	0
148	Total Sulfur (5%)	0230	6.705†	0.9100	7.442	0.6775	0.1656	48	-1.09	148.01	0
148	Total Sulfur (5%)	0444	6.830†	0.0400	7.442	0.6775	0.1656	48	-0.90	148.07	0
148	Total Sulfur (5%)	0157	6.865†	0.0500	7.442	0.6775	0.1656	48	-0.85	148.00	0
148	Total Sulfur (5%)	0102	6.995	0.0100	7.442	0.6775	0.1656	48	-0.66	148.07	0
148	Total Sulfur (5%)	0073	7.025	0.0100	7.442	0.6775	0.1656	48	-0.62	148.01	0
148	Total Sulfur (5%)	0481	7.045	0.0700	7.442	0.6775	0.1656	48	-0.59	148.99	0
148	Total Sulfur (5%)	0476	7.063	0.2595	7.442	0.6775	0.1656	48	-0.56	148.01	0
148	Total Sulfur (5%)	0433	7.125	0.0100	7.442	0.6775	0.1656	48	-0.47	148.99	0
148	Total Sulfur (5%)	0354	7.155	0.0500	7.442	0.6775	0.1656	48	-0.42	148.99	0
148	Total Sulfur (5%)	0096	7.180	0.0400	7.442	0.6775	0.1656	48	-0.39	148.99	0
148	Total Sulfur (5%)	0444	7.190	0.0200	7.442	0.6775	0.1656	48	-0.37	148.01	0
148	Total Sulfur (5%)	0095	7.215	0.0500	7.442	0.6775	0.1656	48	-0.34	148.01	0
148	Total Sulfur (5%)	0523	7.245	0.0100	7.442	0.6775	0.1656	48	-0.29	148.99	0
148	Total Sulfur (5%)	0105	7.265	0.0500	7.442	0.6775	0.1656	48	-0.26	148.01	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 (5%)	0513	7.300	0.0400	7.442	0.6775	0.1656	48	-0.21	148.01	0
148	Total Sulfur (5%)	0360	7.330	0.2000	7.442	0.6775	0.1656	48	-0.17	148.00	0
148	Total Sulfur (5%)	0055	7.555	0.0500	7.442	0.6775	0.1656	48	0.17	148.01	0
148	Total Sulfur (5%)	0368	7.589	0.1410	7.442	0.6775	0.1656	48	0.22	148.99	0
148	Total Sulfur (5%)	0114	7.620	0.2000	7.442	0.6775	0.1656	48	0.26	148.00	0
148	Total Sulfur (5%)	0324	7.630	0.2400	7.442	0.6775	0.1656	48	0.28	148.01	0
148	Total Sulfur (5%)	0402	7.655	0.0300	7.442	0.6775	0.1656	48	0.31	148.07	0
148	Total Sulfur (5%)	0117	7.668	0.2650	7.442	0.6775	0.1656	48	0.33	148.07	0
148	Total Sulfur (5%)	0025	7.687	0.3920	7.442	0.6775	0.1656	48	0.36	148.00	0
148	Total Sulfur (5%)	0037	7.705	0.0130	7.442	0.6775	0.1656	48	0.39	148.07	0
148	Total Sulfur (5%)	0086	7.732	0.4091	7.442	0.6775	0.1656	48	0.43	148.04	0
148	Total Sulfur (5%)	0493	7.750	0.1000	7.442	0.6775	0.1656	48	0.45	148.00	0
148	Total Sulfur (5%)	0451	7.756	0.0290	7.442	0.6775	0.1656	48	0.46	148.00	0
148	Total Sulfur (5%)	0177	7.810	0.0925	7.442	0.6775	0.1656	48	0.54	148.07	0
148	Total Sulfur (5%)	0371	7.815	0.1700	7.442	0.6775	0.1656	48	0.55	148.99	0
148	Total Sulfur (5%)	0292	7.825	0.0100	7.442	0.6775	0.1656	48	0.56	148.07	0
148	Total Sulfur (5%)	0040	7.850	0.3000	7.442	0.6775	0.1656	48	0.60	148.07	0
148	Total Sulfur (5%)	0483	7.870	0.3000	7.442	0.6775	0.1656	48	0.63	148.07	0
148	Total Sulfur (5%)	0029	8.021‡	0.0090	7.442	0.6775	0.1656	48	0.85	148.00	0
148	Total Sulfur (5%)	0049	8.090‡	0.3400	7.442	0.6775	0.1656	48	0.96	148.00	0
148	Total Sulfur (5%)	0136	8.155‡	0.1100	7.442	0.6775	0.1656	48	1.05	148.00	0
148	Total Sulfur (5%)	0325	8.250‡	0.3000	7.442	0.6775	0.1656	48	1.19	148.07	0
148	Total Sulfur (5%)	0220	8.320‡	0.1000	7.442	0.6775	0.1656	48	1.30	148.99	0
148	Total Sulfur (5%)	0482	8.435‡	0.3100	7.442	0.6775	0.1656	48	1.47	148.99	0
148	Total Sulfur (5%)	0452	8.800‡	0.0600	7.442	0.6775	0.1656	48	2.00	148.99	0
148	Total Sulfur (5%)	0546	8.810‡	0.0800	7.442	0.6775	0.1656	48	2.02	148.07	0
148	Total Sulfur (5%)	0494	9.084‡	0.1433	7.442	0.6775	0.1656	48	2.42	148.07	0
148	Total Sulfur (5%)	0422	9.435‡	1.770	7.442	0.6775	0.1656	48	2.94	148.99	1
149	Sulfur - HNO3 soluble (%)	0519	5.005	0.0300	7.191	1.576	0.0281	6	-1.24	149.04	0
149	Sulfur - HNO3 soluble (%)	0423	6.175	0.0500	7.191	1.576	0.0281	6	-0.57	149.04	0
149	Sulfur - HNO3 soluble (%)	0043	7.255	0.0700	7.191	1.576	0.0281	6	0.04	149.04	0
149	Sulfur - HNO3 soluble (%)	0521	7.824	0.0000	7.191	1.576	0.0281	6	0.36	149.04	0
149	Sulfur - HNO3 soluble (%)	0291	8.055	0.0100	7.191	1.576	0.0281	6	0.49	149.04	0
149	Sulfur - HNO3 soluble (%)	0524	8.832	0.0084	7.191	1.576	0.0281	6	0.93	149.04	0
151	Acid Soluble Arsenic (ppm)	0027	0.0020	0.0000	10.38	4.483	1.226	18	-2.31	151.99	0
151	Acid Soluble Arsenic (ppm)	0498	4.640	0.2000	10.38	4.483	1.226	18	-1.28	151.00	0
151	Acid Soluble Arsenic (ppm)	0230	5.560	0.1800	10.38	4.483	1.226	18	-1.08	151.34	0
151	Acid Soluble Arsenic (ppm)	0494	5.811	1.108	10.38	4.483	1.226	18	-1.02	151.33	0
151	Acid Soluble Arsenic (ppm)	0481	7.540	0.0000	10.38	4.483	1.226	18	-0.63	151.99	0
151	Acid Soluble Arsenic (ppm)	0524	8.677	0.4195	10.38	4.483	1.226	18	-0.38	151.30	0
151	Acid Soluble Arsenic (ppm)	0519	8.790	0.0200	10.38	4.483	1.226	18	-0.35	151.99	0
151	Acid Soluble Arsenic (ppm)	0476	8.874	0.4524	10.38	4.483	1.226	18	-0.34	151.99	0
151	Acid Soluble Arsenic (ppm)	0255	10.30	0.2910	10.38	4.483	1.226	18	-0.02	151.30	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				
151	Acid Soluble Arsenic (ppm)	0527	11.33	0.2800	10.38	4.483	1.226	18	0.21	151.33	0
151	Acid Soluble Arsenic (ppm)	0550	11.78	4.910	10.38	4.483	1.226	18	0.31	151.00	0
151	Acid Soluble Arsenic (ppm)	0037	12.26	0.3440	10.38	4.483	1.226	18	0.42	151.33	0
151	Acid Soluble Arsenic (ppm)	0541	12.80	1.600	10.38	4.483	1.226	18	0.54	151.30	0
151	Acid Soluble Arsenic (ppm)	0523	13.34	0.8800	10.38	4.483	1.226	18	0.66	151.30	0
151	Acid Soluble Arsenic (ppm)	0096	13.40	0.8000	10.38	4.483	1.226	18	0.67	151.30	0
151	Acid Soluble Arsenic (ppm)	0515	15.20	4.526	10.38	4.483	1.226	18	1.08	151.34	0
151	Acid Soluble Arsenic (ppm)	0520	15.77	1.060	10.38	4.483	1.226	18	1.20	151.99	0
151	Acid Soluble Arsenic (ppm)	0220	19.50	5.000	10.38	4.483	1.226	18	2.03	151.99	0
151	Acid Soluble Arsenic (ppm)	0368	0.0000	0.0000	10.38	4.483	1.226	18		151.34	4
151	Acid Soluble Arsenic (ppm)	0515	2.419	4.838	10.38	4.483	1.226	18		151.33	4
165	Acid Soluble Boron (1%)	0220	0.9520†	0.0100	1.271	0.1444	0.0316	59	-2.21	165.00	0
165	Acid Soluble Boron (1%)	0521	0.9788†	0.0000	1.271	0.1444	0.0316	59	-2.02	165.30	0
165	Acid Soluble Boron (1%)	0506	1.000†	0.0800	1.271	0.1444	0.0316	59	-1.87	165.00	0
165	Acid Soluble Boron (1%)	0540	1.021†	0.0190	1.271	0.1444	0.0316	59	-1.73	165.00	0
165	Acid Soluble Boron (1%)	0519	1.022†	0.0040	1.271	0.1444	0.0316	59	-1.72	165.99	0
165	Acid Soluble Boron (1%)	0309	1.025†	0.0100	1.271	0.1444	0.0316	59	-1.70	165.00	0
165	Acid Soluble Boron (1%)	0537	1.030†	0.0200	1.271	0.1444	0.0316	59	-1.67	165.30	0
165	Acid Soluble Boron (1%)	0515	1.088	0.0250	1.271	0.1444	0.0316	59	-1.26	165.99	0
165	Acid Soluble Boron (1%)	0486	1.095	0.0100	1.271	0.1444	0.0316	59	-1.22	165.99	0
165	Acid Soluble Boron (1%)	0501	1.095	0.0100	1.271	0.1444	0.0316	59	-1.22	165.99	0
165	Acid Soluble Boron (1%)	0102	1.140	0.0000	1.271	0.1444	0.0316	59	-0.90	165.30	0
165	Acid Soluble Boron (1%)	0535	1.150	0.1000	1.271	0.1444	0.0316	59	-0.83	165.00	0
165	Acid Soluble Boron (1%)	0531	1.155	0.0700	1.271	0.1444	0.0316	59	-0.80	165.00	0
165	Acid Soluble Boron (1%)	0136	1.160	0.0800	1.271	0.1444	0.0316	59	-0.77	165.30	0
165	Acid Soluble Boron (1%)	0307	1.170	0.0200	1.271	0.1444	0.0316	59	-0.70	165.30	0
165	Acid Soluble Boron (1%)	0539	1.175	0.0100	1.271	0.1444	0.0316	59	-0.66	165.00	0
165	Acid Soluble Boron (1%)	0472	1.190	0.0600	1.271	0.1444	0.0316	59	-0.56	165.99	0
165	Acid Soluble Boron (1%)	0043	1.195	0.0100	1.271	0.1444	0.0316	59	-0.52	165.30	0
165	Acid Soluble Boron (1%)	0527	1.200	0.0200	1.271	0.1444	0.0316	59	-0.49	165.99	0
165	Acid Soluble Boron (1%)	0481	1.205	0.0100	1.271	0.1444	0.0316	59	-0.45	165.00	0
165	Acid Soluble Boron (1%)	0405	1.235	0.0100	1.271	0.1444	0.0316	59	-0.25	165.00	0
165	Acid Soluble Boron (1%)	0169	1.242	0.0340	1.271	0.1444	0.0316	59	-0.20	165.00	0
165	Acid Soluble Boron (1%)	0037	1.246	0.0070	1.271	0.1444	0.0316	59	-0.17	165.30	0
165	Acid Soluble Boron (1%)	0550	1.250	0.1000	1.271	0.1444	0.0316	59	-0.14	165.00	0
165	Acid Soluble Boron (1%)	0482	1.250	0.0600	1.271	0.1444	0.0316	59	-0.14	165.99	0
165	Acid Soluble Boron (1%)	0542	1.285	0.0100	1.271	0.1444	0.0316	59	0.10	165.30	0
165	Acid Soluble Boron (1%)	0255	1.287	0.0310	1.271	0.1444	0.0316	59	0.11	165.99	0
165	Acid Soluble Boron (1%)	0534	1.290	0.0000	1.271	0.1444	0.0316	59	0.13	165.00	0
165	Acid Soluble Boron (1%)	0524	1.294	0.0116	1.271	0.1444	0.0316	59	0.16	165.99	0
165	Acid Soluble Boron (1%)	0040	1.299	0.0400	1.271	0.1444	0.0316	59	0.20	165.30	0
165	Acid Soluble Boron (1%)	0292	1.300	0.0000	1.271	0.1444	0.0316	59	0.20	165.30	0
165	Acid Soluble Boron (1%)	0423	1.310	0.0020	1.271	0.1444	0.0316	59	0.27	165.99	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				
165	Acid Soluble Boron (1%)	0029	1.314	0.0100	1.271	0.1444	0.0316	59	0.30	165.00	0
165	Acid Soluble Boron (1%)	0354	1.315	0.0300	1.271	0.1444	0.0316	59	0.31	165.30	0
165	Acid Soluble Boron (1%)	0049	1.318	0.0630	1.271	0.1444	0.0316	59	0.33	165.99	0
165	Acid Soluble Boron (1%)	0117	1.319	0.0280	1.271	0.1444	0.0316	59	0.34	165.99	0
165	Acid Soluble Boron (1%)	0086	1.321	0.1113	1.271	0.1444	0.0316	59	0.35	165.30	0
165	Acid Soluble Boron (1%)	0368	1.337	0.1108	1.271	0.1444	0.0316	59	0.46	165.99	0
165	Acid Soluble Boron (1%)	0433	1.338	0.0040	1.271	0.1444	0.0316	59	0.47	165.30	0
165	Acid Soluble Boron (1%)	0444	1.340	0.0000	1.271	0.1444	0.0316	59	0.48	165.30	0
165	Acid Soluble Boron (1%)	0230	1.340	0.0000	1.271	0.1444	0.0316	59	0.48	165.99	0
165	Acid Soluble Boron (1%)	0498	1.345	0.0100	1.271	0.1444	0.0316	59	0.52	165.00	0
165	Acid Soluble Boron (1%)	0231	1.345	0.0100	1.271	0.1444	0.0316	59	0.52	165.99	0
165	Acid Soluble Boron (1%)	0483	1.360	0.0600	1.271	0.1444	0.0316	59	0.62	165.99	0
165	Acid Soluble Boron (1%)	0360	1.360	0.0200	1.271	0.1444	0.0316	59	0.62	165.99	0
165	Acid Soluble Boron (1%)	0042	1.370	0.0000	1.271	0.1444	0.0316	59	0.69	165.99	0
165	Acid Soluble Boron (1%)	0546	1.374	0.0010	1.271	0.1444	0.0316	59	0.71	165.99	0
165	Acid Soluble Boron (1%)	0494	1.377	0.0714	1.271	0.1444	0.0316	59	0.74	165.30	0
165	Acid Soluble Boron (1%)	0476	1.379	0.0065	1.271	0.1444	0.0316	59	0.75	165.99	0
165	Acid Soluble Boron (1%)	0390	1.390	0.0460	1.271	0.1444	0.0316	59	0.83	165.30	0
165	Acid Soluble Boron (1%)	0025	1.394	0.0320	1.271	0.1444	0.0316	59	0.85	165.99	0
165	Acid Soluble Boron (1%)	0291	1.410	0.0600	1.271	0.1444	0.0316	59	0.97	165.99	0
165	Acid Soluble Boron (1%)	0055	1.426	0.0460	1.271	0.1444	0.0316	59	1.08	165.00	0
165	Acid Soluble Boron (1%)	0422	1.430	0.0600	1.271	0.1444	0.0316	59	1.10	165.30	0
165	Acid Soluble Boron (1%)	0324	1.435	0.0700	1.271	0.1444	0.0316	59	1.14	165.30	0
165	Acid Soluble Boron (1%)	0106	1.481‡	0.0311	1.271	0.1444	0.0316	59	1.46	165.30	0
165	Acid Soluble Boron (1%)	0452	1.510‡	0.0000	1.271	0.1444	0.0316	59	1.66	165.99	0
165	Acid Soluble Boron (1%)	0325	1.585‡	0.0900	1.271	0.1444	0.0316	59	2.18	165.99	0
165	Acid Soluble Boron (1%)	0513	1.680‡	0.0200	1.271	0.1444	0.0316	59	2.84	165.99	0
165	Acid Soluble Boron (1%)	0552	1.395	0.3100	1.271	0.1444	0.0316	59	0.86	165.99	1
171	Water Soluble Boron (%)	0444	0.7350	0.0900	1.030	0.1559	0.0356	9	-1.75	171.99	0
171	Water Soluble Boron (%)	0531	0.9650	0.0500	1.030	0.1559	0.0356	9	-0.38	171.10	0
171	Water Soluble Boron (%)	0535	0.9750	0.0500	1.030	0.1559	0.0356	9	-0.33	171.10	0
171	Water Soluble Boron (%)	0539	1.000	0.0200	1.030	0.1559	0.0356	9	-0.18	171.10	0
171	Water Soluble Boron (%)	0540	1.005	0.0100	1.030	0.1559	0.0356	9	-0.15	171.00	0
171	Water Soluble Boron (%)	0532	1.025	0.0700	1.030	0.1559	0.0356	9	-0.03	171.10	0
171	Water Soluble Boron (%)	0533	1.025	0.0100	1.030	0.1559	0.0356	9	-0.03	171.10	0
171	Water Soluble Boron (%)	0027	1.215	0.0100	1.030	0.1559	0.0356	9	1.10	171.99	0
171	Water Soluble Boron (%)	0402	1.505	0.0100	1.030	0.1559	0.0356	9	2.81	171.99	0
181	Acid Soluble Cadmium (ppm)	0444	425.0	4.000	553.1	76.29	20.35	25	-1.68	181.30	0
181	Acid Soluble Cadmium (ppm)	0255	448.5	26.35	553.1	76.29	20.35	25	-1.37	181.30	0
181	Acid Soluble Cadmium (ppm)	0368	458.8	140.5	553.1	76.29	20.35	25	-1.24	181.34	0
181	Acid Soluble Cadmium (ppm)	0220	480.5	3.000	553.1	76.29	20.35	25	-0.95	181.99	0
181	Acid Soluble Cadmium (ppm)	0527	482.9	7.070	553.1	76.29	20.35	25	-0.92	181.33	0
181	Acid Soluble Cadmium (ppm)	0519	494.0	0.3000	553.1	76.29	20.35	25	-0.78	181.99	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				
181	Acid Soluble Cadmium (ppm)	0027	500.2	23.29	553.1	76.29	20.35	25	-0.69	181.99	0
181	Acid Soluble Cadmium (ppm)	0506	511.0	88.00	553.1	76.29	20.35	25	-0.55	181.99	0
181	Acid Soluble Cadmium (ppm)	0476	511.2	8.386	553.1	76.29	20.35	25	-0.55	181.99	0
181	Acid Soluble Cadmium (ppm)	0520	534.3	12.30	553.1	76.29	20.35	25	-0.25	181.99	0
181	Acid Soluble Cadmium (ppm)	0523	541.1	12.10	553.1	76.29	20.35	25	-0.16	181.30	0
181	Acid Soluble Cadmium (ppm)	0035	542.0	6.000	553.1	76.29	20.35	25	-0.15	181.30	0
181	Acid Soluble Cadmium (ppm)	0086	563.5	1.160	553.1	76.29	20.35	25	0.14	181.33	0
181	Acid Soluble Cadmium (ppm)	0524	567.6	1.578	553.1	76.29	20.35	25	0.19	181.30	0
181	Acid Soluble Cadmium (ppm)	0037	570.6	8.372	553.1	76.29	20.35	25	0.23	181.33	0
181	Acid Soluble Cadmium (ppm)	0096	577.5	4.400	553.1	76.29	20.35	25	0.32	181.30	0
181	Acid Soluble Cadmium (ppm)	0494	583.8	40.09	553.1	76.29	20.35	25	0.40	181.33	0
181	Acid Soluble Cadmium (ppm)	0481	584.2	4.900	553.1	76.29	20.35	25	0.41	181.99	0
181	Acid Soluble Cadmium (ppm)	0117	595.3	41.20	553.1	76.29	20.35	25	0.55	181.33	0
181	Acid Soluble Cadmium (ppm)	0541	603.5	11.00	553.1	76.29	20.35	25	0.66	181.30	0
181	Acid Soluble Cadmium (ppm)	0230	608.0	4.000	553.1	76.29	20.35	25	0.72	181.34	0
181	Acid Soluble Cadmium (ppm)	0233	634.0	30.70	553.1	76.29	20.35	25	1.06	181.33	0
181	Acid Soluble Cadmium (ppm)	0498	662.0	4.000	553.1	76.29	20.35	25	1.43	181.00	0
181	Acid Soluble Cadmium (ppm)	0515	668.9	12.95	553.1	76.29	20.35	25	1.52	181.33	0
181	Acid Soluble Cadmium (ppm)	0482	703.5	13.00	553.1	76.29	20.35	25	1.97	181.30	0
181	Acid Soluble Cadmium (ppm)	0550	176.4	336.3	553.1	76.29	20.35	25	-4.94	181.00	1
181	Acid Soluble Cadmium (ppm)	0515	720.3	288.5	553.1	76.29	20.35	25	2.19	181.34	1
191	Acid Soluble Chromium (ppm)	0519	141.9	0.0600	208.6	43.68	15.96	23	-1.53	191.99	0
191	Acid Soluble Chromium (ppm)	0506	148.5	3.000	208.6	43.68	15.96	23	-1.37	191.99	0
191	Acid Soluble Chromium (ppm)	0444	151.5	5.000	208.6	43.68	15.96	23	-1.31	191.30	0
191	Acid Soluble Chromium (ppm)	0368	155.7	33.36	208.6	43.68	15.96	23	-1.21	191.34	0
191	Acid Soluble Chromium (ppm)	0550	156.7	72.73	208.6	43.68	15.96	23	-1.19	191.00	0
191	Acid Soluble Chromium (ppm)	0541	180.5	5.000	208.6	43.68	15.96	23	-0.64	191.30	0
191	Acid Soluble Chromium (ppm)	0523	189.0	1.500	208.6	43.68	15.96	23	-0.45	191.30	0
191	Acid Soluble Chromium (ppm)	0220	196.0	52.00	208.6	43.68	15.96	23	-0.29	191.99	0
191	Acid Soluble Chromium (ppm)	0515	199.0	45.25	208.6	43.68	15.96	23	-0.22	191.34	0
191	Acid Soluble Chromium (ppm)	0476	204.6	3.566	208.6	43.68	15.96	23	-0.09	191.99	0
191	Acid Soluble Chromium (ppm)	0527	213.2	5.530	208.6	43.68	15.96	23	0.11	191.33	0
191	Acid Soluble Chromium (ppm)	0481	215.7	2.200	208.6	43.68	15.96	23	0.16	191.99	0
191	Acid Soluble Chromium (ppm)	0096	216.3	23.40	208.6	43.68	15.96	23	0.18	191.30	0
191	Acid Soluble Chromium (ppm)	0230	219.5	11.00	208.6	43.68	15.96	23	0.25	191.34	0
191	Acid Soluble Chromium (ppm)	0498	220.0	1.100	208.6	43.68	15.96	23	0.26	191.00	0
191	Acid Soluble Chromium (ppm)	0037	227.0	0.9300	208.6	43.68	15.96	23	0.42	191.33	0
191	Acid Soluble Chromium (ppm)	0494	232.7	7.922	208.6	43.68	15.96	23	0.55	191.33	0
191	Acid Soluble Chromium (ppm)	0520	242.8	15.90	208.6	43.68	15.96	23	0.78	191.99	0
191	Acid Soluble Chromium (ppm)	0035	246.0	6.000	208.6	43.68	15.96	23	0.86	191.30	0
191	Acid Soluble Chromium (ppm)	0086	254.1	36.24	208.6	43.68	15.96	23	1.04	191.33	0
191	Acid Soluble Chromium (ppm)	0482	255.0	20.00	208.6	43.68	15.96	23	1.06	191.30	0
191	Acid Soluble Chromium (ppm)	0515	258.6	6.142	208.6	43.68	15.96	23	1.15	191.33	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				
191	Acid Soluble Chromium (ppm)	0117	271.5	9.300	208.6	43.68	15.96	23	1.44	191.33	0
202	Acid Soluble Cobalt (ppm)	0550	137.3	26.06	216.9	25.04	9.235	24	-3.18	202.33	0
202	Acid Soluble Cobalt (ppm)	0255	172.0	8.436	216.9	25.04	9.235	24	-1.79	202.99	0
202	Acid Soluble Cobalt (ppm)	0027	183.6	9.640	216.9	25.04	9.235	24	-1.33	202.99	0
202	Acid Soluble Cobalt (ppm)	0368	186.6	30.85	216.9	25.04	9.235	24	-1.21	202.34	0
202	Acid Soluble Cobalt (ppm)	0096	192.3	0.9000	216.9	25.04	9.235	24	-0.98	202.30	0
202	Acid Soluble Cobalt (ppm)	0476	194.1	7.337	216.9	25.04	9.235	24	-0.91	202.99	0
202	Acid Soluble Cobalt (ppm)	0527	202.4	1.450	216.9	25.04	9.235	24	-0.58	202.33	0
202	Acid Soluble Cobalt (ppm)	0523	204.7	3.200	216.9	25.04	9.235	24	-0.49	202.30	0
202	Acid Soluble Cobalt (ppm)	0482	207.5	1.000	216.9	25.04	9.235	24	-0.38	202.30	0
202	Acid Soluble Cobalt (ppm)	0423	213.9	3.500	216.9	25.04	9.235	24	-0.12	202.32	0
202	Acid Soluble Cobalt (ppm)	0086	218.4	1.800	216.9	25.04	9.235	24	0.06	202.33	0
202	Acid Soluble Cobalt (ppm)	0520	222.0	10.30	216.9	25.04	9.235	24	0.20	202.99	0
202	Acid Soluble Cobalt (ppm)	0035	222.5	3.000	216.9	25.04	9.235	24	0.22	202.30	0
202	Acid Soluble Cobalt (ppm)	0524	226.2	9.180	216.9	25.04	9.235	24	0.37	202.30	0
202	Acid Soluble Cobalt (ppm)	0494	228.6	9.950	216.9	25.04	9.235	24	0.47	202.33	0
202	Acid Soluble Cobalt (ppm)	0481	228.7	12.60	216.9	25.04	9.235	24	0.47	202.99	0
202	Acid Soluble Cobalt (ppm)	0515	229.3	25.48	216.9	25.04	9.235	24	0.49	202.34	0
202	Acid Soluble Cobalt (ppm)	0037	236.0	0.8510	216.9	25.04	9.235	24	0.76	202.33	0
202	Acid Soluble Cobalt (ppm)	0515	237.4	20.46	216.9	25.04	9.235	24	0.82	202.33	0
202	Acid Soluble Cobalt (ppm)	0230	239.0	2.000	216.9	25.04	9.235	24	0.88	202.34	0
202	Acid Soluble Cobalt (ppm)	0519	239.0	0.1500	216.9	25.04	9.235	24	0.88	202.99	0
202	Acid Soluble Cobalt (ppm)	0233	241.1	1.200	216.9	25.04	9.235	24	0.97	202.33	0
202	Acid Soluble Cobalt (ppm)	0117	241.1	6.400	216.9	25.04	9.235	24	0.97	202.33	0
202	Acid Soluble Cobalt (ppm)	0546	252.6	25.90	216.9	25.04	9.235	24	1.42	202.33	0
202	Acid Soluble Cobalt (ppm)	0220	225.0	70.00	216.9	25.04	9.235	24	0.32	202.99	1
221	Acid Soluble Copper (1%)	0513	0.7475†	0.0150	0.8981	0.0750	0.0270	73	-2.01	221.00	0
221	Acid Soluble Copper (1%)	0486	0.7550†	0.0100	0.8981	0.0750	0.0270	73	-1.91	221.33	0
221	Acid Soluble Copper (1%)	0476	0.7587†	0.0373	0.8981	0.0750	0.0270	73	-1.86	221.99	0
221	Acid Soluble Copper (1%)	0035	0.7795†	0.0470	0.8981	0.0750	0.0270	73	-1.58	221.30	0
221	Acid Soluble Copper (1%)	0102	0.7800†	0.0000	0.8981	0.0750	0.0270	73	-1.57	221.30	0
221	Acid Soluble Copper (1%)	0506	0.7900†	0.0000	0.8981	0.0750	0.0270	73	-1.44	221.99	0
221	Acid Soluble Copper (1%)	0501	0.8000†	0.0000	0.8981	0.0750	0.0270	73	-1.31	221.99	0
221	Acid Soluble Copper (1%)	0368	0.8087	0.0175	0.8981	0.0750	0.0270	73	-1.19	221.99	0
221	Acid Soluble Copper (1%)	0025	0.8189	0.0132	0.8981	0.0750	0.0270	73	-1.06	221.33	0
221	Acid Soluble Copper (1%)	0324	0.8250	0.0500	0.8981	0.0750	0.0270	73	-0.97	221.30	0
221	Acid Soluble Copper (1%)	0498	0.8400	0.0600	0.8981	0.0750	0.0270	73	-0.77	221.00	0
221	Acid Soluble Copper (1%)	0136	0.8450	0.0100	0.8981	0.0750	0.0270	73	-0.71	221.33	0
221	Acid Soluble Copper (1%)	0233	0.8455	0.0042	0.8981	0.0750	0.0270	73	-0.70	221.33	0
221	Acid Soluble Copper (1%)	0177	0.8468	0.0075	0.8981	0.0750	0.0270	73	-0.68	221.33	0
221	Acid Soluble Copper (1%)	0055	0.8472	0.0043	0.8981	0.0750	0.0270	73	-0.68	221.33	0
221	Acid Soluble Copper (1%)	0292	0.8500	0.0000	0.8981	0.0750	0.0270	73	-0.64	221.32	0
221	Acid Soluble Copper (1%)	0485	0.8503	0.0082	0.8981	0.0750	0.0270	73	-0.64	221.00	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				
221	Acid Soluble Copper (1%)	0049	0.8513	0.0198	0.8981	0.0750	0.0270	73	-0.62	221.30	0
221	Acid Soluble Copper (1%)	0521	0.8534	0.0000	0.8981	0.0750	0.0270	73	-0.60	221.32	0
221	Acid Soluble Copper (1%)	0433	0.8545	0.0050	0.8981	0.0750	0.0270	73	-0.58	221.30	0
221	Acid Soluble Copper (1%)	0307	0.8550	0.0260	0.8981	0.0750	0.0270	73	-0.57	221.30	0
221	Acid Soluble Copper (1%)	0444	0.8550	0.0100	0.8981	0.0750	0.0270	73	-0.57	221.30	0
221	Acid Soluble Copper (1%)	0255	0.8555	0.0250	0.8981	0.0750	0.0270	73	-0.57	221.30	0
221	Acid Soluble Copper (1%)	0029	0.8570	0.0179	0.8981	0.0750	0.0270	73	-0.55	221.00	0
221	Acid Soluble Copper (1%)	0494	0.8574	0.0083	0.8981	0.0750	0.0270	73	-0.54	221.33	0
221	Acid Soluble Copper (1%)	0481	0.8600	0.0200	0.8981	0.0750	0.0270	73	-0.51	221.99	0
221	Acid Soluble Copper (1%)	0086	0.8642	0.0556	0.8981	0.0750	0.0270	73	-0.45	221.33	0
221	Acid Soluble Copper (1%)	0360	0.8647	0.0202	0.8981	0.0750	0.0270	73	-0.44	221.30	0
221	Acid Soluble Copper (1%)	0472	0.8700	0.0000	0.8981	0.0750	0.0270	73	-0.37	221.30	0
221	Acid Soluble Copper (1%)	0493	0.8700	0.0200	0.8981	0.0750	0.0270	73	-0.37	221.33	0
221	Acid Soluble Copper (1%)	0405	0.8700	0.0200	0.8981	0.0750	0.0270	73	-0.37	221.99	0
221	Acid Soluble Copper (1%)	0037	0.8730	0.0300	0.8981	0.0750	0.0270	73	-0.33	221.33	0
221	Acid Soluble Copper (1%)	0546	0.8765	0.0470	0.8981	0.0750	0.0270	73	-0.29	221.33	0
221	Acid Soluble Copper (1%)	0106	0.8872	0.0185	0.8981	0.0750	0.0270	73	-0.15	221.33	0
221	Acid Soluble Copper (1%)	0105	0.8880	0.0040	0.8981	0.0750	0.0270	73	-0.13	221.00	0
221	Acid Soluble Copper (1%)	0523	0.8890	0.0280	0.8981	0.0750	0.0270	73	-0.12	221.99	0
221	Acid Soluble Copper (1%)	0390	0.8923	0.0340	0.8981	0.0750	0.0270	73	-0.08	221.99	0
221	Acid Soluble Copper (1%)	0231	0.8950	0.0100	0.8981	0.0750	0.0270	73	-0.04	221.30	0
221	Acid Soluble Copper (1%)	0354	0.8950	0.0700	0.8981	0.0750	0.0270	73	-0.04	221.30	0
221	Acid Soluble Copper (1%)	0515	0.8952	0.0568	0.8981	0.0750	0.0270	73	-0.04	221.99	0
221	Acid Soluble Copper (1%)	0234	0.9000	0.0000	0.8981	0.0750	0.0270	73	0.03	221.30	0
221	Acid Soluble Copper (1%)	0402	0.9000	0.0000	0.8981	0.0750	0.0270	73	0.03	221.30	0
221	Acid Soluble Copper (1%)	0552	0.9000	0.0400	0.8981	0.0750	0.0270	73	0.03	221.30	0
221	Acid Soluble Copper (1%)	0230	0.9090	0.0320	0.8981	0.0750	0.0270	73	0.15	221.30	0
221	Acid Soluble Copper (1%)	0041	0.9150	0.0900	0.8981	0.0750	0.0270	73	0.23	221.30	0
221	Acid Soluble Copper (1%)	0043	0.9150	0.0100	0.8981	0.0750	0.0270	73	0.23	221.32	0
221	Acid Soluble Copper (1%)	0117	0.9158	0.0718	0.8981	0.0750	0.0270	73	0.24	221.33	0
221	Acid Soluble Copper (1%)	0541	0.9165	0.0330	0.8981	0.0750	0.0270	73	0.25	221.99	0
221	Acid Soluble Copper (1%)	0027	0.9275	0.0330	0.8981	0.0750	0.0270	73	0.39	221.99	0
221	Acid Soluble Copper (1%)	0291	0.9300	0.0200	0.8981	0.0750	0.0270	73	0.43	221.99	0
221	Acid Soluble Copper (1%)	0524	0.9360	0.0078	0.8981	0.0750	0.0270	73	0.51	221.99	0
221	Acid Soluble Copper (1%)	0389	0.9385	0.0030	0.8981	0.0750	0.0270	73	0.54	221.99	0
221	Acid Soluble Copper (1%)	0482	0.9400	0.0800	0.8981	0.0750	0.0270	73	0.56	221.30	0
221	Acid Soluble Copper (1%)	0042	0.9400	0.1200	0.8981	0.0750	0.0270	73	0.56	221.99	0
221	Acid Soluble Copper (1%)	0040	0.9409	0.0061	0.8981	0.0750	0.0270	73	0.57	221.00	0
221	Acid Soluble Copper (1%)	0534	0.9500	0.0000	0.8981	0.0750	0.0270	73	0.69	221.00	0
221	Acid Soluble Copper (1%)	0452	0.9500	0.0200	0.8981	0.0750	0.0270	73	0.69	221.30	0
221	Acid Soluble Copper (1%)	0531	0.9650	0.0300	0.8981	0.0750	0.0270	73	0.89	221.00	0
221	Acid Soluble Copper (1%)	0096	0.9695	0.0090	0.8981	0.0750	0.0270	73	0.95	221.30	0
221	Acid Soluble Copper (1%)	0519	0.9750	0.0100	0.8981	0.0750	0.0270	73	1.03	221.99	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				
221	Acid Soluble Copper (1%)	0325	0.9800	0.1200	0.8981	0.0750	0.0270	73	1.09	221.33	0
221	Acid Soluble Copper (1%)	0422	0.9830	0.0740	0.8981	0.0750	0.0270	73	1.13	221.30	0
221	Acid Soluble Copper (1%)	0533	0.9850	0.0100	0.8981	0.0750	0.0270	73	1.16	221.00	0
221	Acid Soluble Copper (1%)	0540	0.9900	0.0200	0.8981	0.0750	0.0270	73	1.23	221.00	0
221	Acid Soluble Copper (1%)	0527	0.9900	0.0000	0.8981	0.0750	0.0270	73	1.23	221.33	0
221	Acid Soluble Copper (1%)	0537	1.005‡	0.0300	0.8981	0.0750	0.0270	73	1.43	221.00	0
221	Acid Soluble Copper (1%)	0539	1.005‡	0.0100	0.8981	0.0750	0.0270	73	1.43	221.00	0
221	Acid Soluble Copper (1%)	0536	1.010‡	0.0200	0.8981	0.0750	0.0270	73	1.49	221.00	0
221	Acid Soluble Copper (1%)	0535	1.025‡	0.0500	0.8981	0.0750	0.0270	73	1.69	221.00	0
221	Acid Soluble Copper (1%)	0532	1.060‡	0.0800	0.8981	0.0750	0.0270	73	2.16	221.00	0
221	Acid Soluble Copper (1%)	0515	1.148‡	0.0483	0.8981	0.0750	0.0270	73	3.33	221.33	0
221	Acid Soluble Copper (1%)	0423	1.155‡	0.0300	0.8981	0.0750	0.0270	73	3.43	221.32	0
221	Acid Soluble Copper (1%)	0520	1.175‡	0.0300	0.8981	0.0750	0.0270	73	3.69	221.99	0
221	Acid Soluble Copper (1%)	0550	0.8450	0.2300	0.8981	0.0750	0.0270	73	-0.71	221.00	1
221	Acid Soluble Copper (1%)	0483	0.9705	0.1590	0.8981	0.0750	0.0270	73	0.97	221.30	1
241	Acid Soluble Iron (%)	0521	1.749	0.0000	2.072	0.1638	0.0751	26	-1.98	241.32	0
241	Acid Soluble Iron (%)	0527	1.760	0.0600	2.072	0.1638	0.0751	26	-1.91	241.33	0
241	Acid Soluble Iron (%)	0513	1.835	0.0300	2.072	0.1638	0.0751	26	-1.45	241.00	0
241	Acid Soluble Iron (%)	0494	1.903	0.0884	2.072	0.1638	0.0751	26	-1.04	241.33	0
241	Acid Soluble Iron (%)	0524	1.928	0.1413	2.072	0.1638	0.0751	26	-0.88	241.99	0
241	Acid Soluble Iron (%)	0086	1.937	0.1301	2.072	0.1638	0.0751	26	-0.82	241.33	0
241	Acid Soluble Iron (%)	0472	1.945	0.0300	2.072	0.1638	0.0751	26	-0.78	241.30	0
241	Acid Soluble Iron (%)	0423	1.980	0.0100	2.072	0.1638	0.0751	26	-0.56	241.32	0
241	Acid Soluble Iron (%)	0096	1.985	0.0100	2.072	0.1638	0.0751	26	-0.53	241.30	0
241	Acid Soluble Iron (%)	0515	2.062	0.1414	2.072	0.1638	0.0751	26	-0.06	241.99	0
241	Acid Soluble Iron (%)	0552	2.065	0.0700	2.072	0.1638	0.0751	26	-0.05	241.30	0
241	Acid Soluble Iron (%)	0117	2.072	0.0270	2.072	0.1638	0.0751	26	-0.01	241.33	0
241	Acid Soluble Iron (%)	0105	2.080	0.1990	2.072	0.1638	0.0751	26	0.04	241.00	0
241	Acid Soluble Iron (%)	0049	2.086	0.0316	2.072	0.1638	0.0751	26	0.08	241.30	0
241	Acid Soluble Iron (%)	0055	2.089	0.0050	2.072	0.1638	0.0751	26	0.10	241.33	0
241	Acid Soluble Iron (%)	0493	2.100	0.1000	2.072	0.1638	0.0751	26	0.17	241.33	0
241	Acid Soluble Iron (%)	0546	2.140	0.0360	2.072	0.1638	0.0751	26	0.41	241.33	0
241	Acid Soluble Iron (%)	0483	2.145	0.0900	2.072	0.1638	0.0751	26	0.44	241.30	0
241	Acid Soluble Iron (%)	0041	2.180	0.0800	2.072	0.1638	0.0751	26	0.66	241.30	0
241	Acid Soluble Iron (%)	0035	2.185	0.0700	2.072	0.1638	0.0751	26	0.69	241.30	0
241	Acid Soluble Iron (%)	0034	2.197	0.0940	2.072	0.1638	0.0751	26	0.76	241.33	0
241	Acid Soluble Iron (%)	0402	2.200	0.0000	2.072	0.1638	0.0751	26	0.78	241.30	0
241	Acid Soluble Iron (%)	0354	2.235	0.2100	2.072	0.1638	0.0751	26	0.99	241.30	0
241	Acid Soluble Iron (%)	0515	2.245	0.2286	2.072	0.1638	0.0751	26	1.05	241.33	0
241	Acid Soluble Iron (%)	0482	2.350	0.0200	2.072	0.1638	0.0751	26	1.69	241.30	0
241	Acid Soluble Iron (%)	0389	2.425	0.0500	2.072	0.1638	0.0751	26	2.15	241.99	0
241	Acid Soluble Iron (%)	0106	2.328	0.3683	2.072	0.1638	0.0751	26	1.56	241.33	1
251	Acid Soluble Lead (ppm)	0550	336.6	62.96	579.4	81.69	21.44	25	-2.97	251.00	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				
251	Acid Soluble Lead (ppm)	0444	429.0	20.00	579.4	81.69	21.44	25	-1.84	251.30	0
251	Acid Soluble Lead (ppm)	0523	466.8	2.200	579.4	81.69	21.44	25	-1.38	251.30	0
251	Acid Soluble Lead (ppm)	0519	486.2	3.610	579.4	81.69	21.44	25	-1.14	251.99	0
251	Acid Soluble Lead (ppm)	0498	498.0	10.00	579.4	81.69	21.44	25	-1.00	251.00	0
251	Acid Soluble Lead (ppm)	0368	513.0	107.0	579.4	81.69	21.44	25	-0.81	251.34	0
251	Acid Soluble Lead (ppm)	0520	520.8	4.600	579.4	81.69	21.44	25	-0.72	251.99	0
251	Acid Soluble Lead (ppm)	0476	528.3	11.05	579.4	81.69	21.44	25	-0.63	251.99	0
251	Acid Soluble Lead (ppm)	0482	550.5	3.000	579.4	81.69	21.44	25	-0.35	251.30	0
251	Acid Soluble Lead (ppm)	0086	561.4	27.78	579.4	81.69	21.44	25	-0.22	251.33	0
251	Acid Soluble Lead (ppm)	0255	581.4	62.80	579.4	81.69	21.44	25	0.02	251.30	0
251	Acid Soluble Lead (ppm)	0096	582.6	20.20	579.4	81.69	21.44	25	0.04	251.30	0
251	Acid Soluble Lead (ppm)	0037	600.3	14.44	579.4	81.69	21.44	25	0.26	251.33	0
251	Acid Soluble Lead (ppm)	0117	607.2	7.500	579.4	81.69	21.44	25	0.34	251.33	0
251	Acid Soluble Lead (ppm)	0506	608.5	15.00	579.4	81.69	21.44	25	0.36	251.99	0
251	Acid Soluble Lead (ppm)	0527	609.7	8.600	579.4	81.69	21.44	25	0.37	251.33	0
251	Acid Soluble Lead (ppm)	0481	610.8	1.900	579.4	81.69	21.44	25	0.38	251.99	0
251	Acid Soluble Lead (ppm)	0230	616.5	3.000	579.4	81.69	21.44	25	0.45	251.34	0
251	Acid Soluble Lead (ppm)	0541	631.5	47.00	579.4	81.69	21.44	25	0.64	251.30	0
251	Acid Soluble Lead (ppm)	0494	643.6	16.98	579.4	81.69	21.44	25	0.79	251.33	0
251	Acid Soluble Lead (ppm)	0524	647.4	2.716	579.4	81.69	21.44	25	0.83	251.30	0
251	Acid Soluble Lead (ppm)	0515	665.5	3.033	579.4	81.69	21.44	25	1.05	251.33	0
251	Acid Soluble Lead (ppm)	0035	675.5	47.00	579.4	81.69	21.44	25	1.18	251.30	0
251	Acid Soluble Lead (ppm)	0233	676.0	22.70	579.4	81.69	21.44	25	1.18	251.33	0
251	Acid Soluble Lead (ppm)	0220	689.5	11.00	579.4	81.69	21.44	25	1.35	251.99	0
251	Acid Soluble Lead (ppm)	0515	736.3	303.4	579.4	81.69	21.44	25	1.92	251.34	1
261	Acid Soluble Manganese (5%)	0541	3.680†	0.3600	8.393	1.289	0.1866	72	-3.66	261.30	0
261	Acid Soluble Manganese (5%)	0486	4.545†	0.0900	8.393	1.289	0.1866	72	-2.99	261.35	0
261	Acid Soluble Manganese (5%)	0519	5.000†	0.0400	8.393	1.289	0.1866	72	-2.63	261.99	0
261	Acid Soluble Manganese (5%)	0532	5.605†	0.2300	8.393	1.289	0.1866	72	-2.16	261.12	0
261	Acid Soluble Manganese (5%)	0515	5.667†	0.0597	8.393	1.289	0.1866	72	-2.11	261.35	0
261	Acid Soluble Manganese (5%)	0537	6.110†	0.0200	8.393	1.289	0.1866	72	-1.77	261.11	0
261	Acid Soluble Manganese (5%)	0506	6.245†	0.1100	8.393	1.289	0.1866	72	-1.67	261.99	0
261	Acid Soluble Manganese (5%)	0102	6.265†	0.0500	8.393	1.289	0.1866	72	-1.65	261.30	0
261	Acid Soluble Manganese (5%)	0307	6.385†	0.0900	8.393	1.289	0.1866	72	-1.56	261.30	0
261	Acid Soluble Manganese (5%)	0255	6.451†	0.0260	8.393	1.289	0.1866	72	-1.51	261.99	0
261	Acid Soluble Manganese (5%)	0540	6.500†	0.4000	8.393	1.289	0.1866	72	-1.47	261.12	0
261	Acid Soluble Manganese (5%)	0533	6.750†	0.1000	8.393	1.289	0.1866	72	-1.27	261.12	0
261	Acid Soluble Manganese (5%)	0536	6.755†	0.0500	8.393	1.289	0.1866	72	-1.27	261.12	0
261	Acid Soluble Manganese (5%)	0539	6.795†	0.0300	8.393	1.289	0.1866	72	-1.24	261.12	0
261	Acid Soluble Manganese (5%)	0527	6.925†	0.0500	8.393	1.289	0.1866	72	-1.14	261.35	0
261	Acid Soluble Manganese (5%)	0531	7.025†	0.1500	8.393	1.289	0.1866	72	-1.06	261.12	0
261	Acid Soluble Manganese (5%)	0535	7.100†	0.2000	8.393	1.289	0.1866	72	-1.00	261.12	0
261	Acid Soluble Manganese (5%)	0476	7.224†	0.4894	8.393	1.289	0.1866	72	-0.91	261.99	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				
261	Acid Soluble Manganese (5%)	0513	7.785	0.1100	8.393	1.289	0.1866	72	-0.47	261.12	0
261	Acid Soluble Manganese (5%)	0542	7.868	0.2210	8.393	1.289	0.1866	72	-0.41	261.34	0
261	Acid Soluble Manganese (5%)	0493	8.050	0.1000	8.393	1.289	0.1866	72	-0.27	261.35	0
261	Acid Soluble Manganese (5%)	0042	8.150	0.0800	8.393	1.289	0.1866	72	-0.19	261.99	0
261	Acid Soluble Manganese (5%)	0292	8.290	0.0000	8.393	1.289	0.1866	72	-0.08	261.14	0
261	Acid Soluble Manganese (5%)	0040	8.347	0.0870	8.393	1.289	0.1866	72	-0.04	261.12	0
261	Acid Soluble Manganese (5%)	0472	8.350	0.3000	8.393	1.289	0.1866	72	-0.03	261.30	0
261	Acid Soluble Manganese (5%)	0073	8.455	0.0900	8.393	1.289	0.1866	72	0.05	261.30	0
261	Acid Soluble Manganese (5%)	0433	8.471	0.0090	8.393	1.289	0.1866	72	0.06	261.30	0
261	Acid Soluble Manganese (5%)	0136	8.480	0.3000	8.393	1.289	0.1866	72	0.07	261.35	0
261	Acid Soluble Manganese (5%)	0034	8.504	0.1350	8.393	1.289	0.1866	72	0.09	261.35	0
261	Acid Soluble Manganese (5%)	0498	8.525	0.3500	8.393	1.289	0.1866	72	0.10	261.11	0
261	Acid Soluble Manganese (5%)	0444	8.550	0.0400	8.393	1.289	0.1866	72	0.12	261.32	0
261	Acid Soluble Manganese (5%)	0117	8.634	0.1330	8.393	1.289	0.1866	72	0.19	261.35	0
261	Acid Soluble Manganese (5%)	0552	8.650	0.2000	8.393	1.289	0.1866	72	0.20	261.32	0
261	Acid Soluble Manganese (5%)	0096	8.713	0.0200	8.393	1.289	0.1866	72	0.25	261.30	0
261	Acid Soluble Manganese (5%)	0481	8.715	0.0500	8.393	1.289	0.1866	72	0.25	261.99	0
261	Acid Soluble Manganese (5%)	0037	8.718	0.3285	8.393	1.289	0.1866	72	0.25	261.35	0
261	Acid Soluble Manganese (5%)	0177	8.728	0.0141	8.393	1.289	0.1866	72	0.26	261.35	0
261	Acid Soluble Manganese (5%)	0324	8.785	0.4700	8.393	1.289	0.1866	72	0.30	261.31	0
261	Acid Soluble Manganese (5%)	0485	8.802	0.1230	8.393	1.289	0.1866	72	0.32	261.12	0
261	Acid Soluble Manganese (5%)	0550	8.805	0.2300	8.393	1.289	0.1866	72	0.32	261.12	0
261	Acid Soluble Manganese (5%)	0234	8.850	0.1000	8.393	1.289	0.1866	72	0.35	261.31	0
261	Acid Soluble Manganese (5%)	0402	8.850	0.1000	8.393	1.289	0.1866	72	0.35	261.32	0
261	Acid Soluble Manganese (5%)	0055	8.862	0.2250	8.393	1.289	0.1866	72	0.36	261.35	0
261	Acid Soluble Manganese (5%)	0405	8.870	0.2200	8.393	1.289	0.1866	72	0.37	261.99	0
261	Acid Soluble Manganese (5%)	0483	8.890	0.4400	8.393	1.289	0.1866	72	0.39	261.32	0
261	Acid Soluble Manganese (5%)	0086	8.900	0.7448	8.393	1.289	0.1866	72	0.39	261.33	0
261	Acid Soluble Manganese (5%)	0230	8.940	0.0600	8.393	1.289	0.1866	72	0.42	261.31	0
261	Acid Soluble Manganese (5%)	0049	8.956	0.7268	8.393	1.289	0.1866	72	0.44	261.32	0
261	Acid Soluble Manganese (5%)	0360	8.985	0.1100	8.393	1.289	0.1866	72	0.46	261.31	0
261	Acid Soluble Manganese (5%)	0524	8.995	0.1327	8.393	1.289	0.1866	72	0.47	261.99	0
261	Acid Soluble Manganese (5%)	0390	9.008	0.1040	8.393	1.289	0.1866	72	0.48	261.30	0
261	Acid Soluble Manganese (5%)	0106	9.052	0.1552	8.393	1.289	0.1866	72	0.51	261.35	0
261	Acid Soluble Manganese (5%)	0354	9.100	0.1600	8.393	1.289	0.1866	72	0.55	261.30	0
261	Acid Soluble Manganese (5%)	0494	9.107	0.0506	8.393	1.289	0.1866	72	0.55	261.35	0
261	Acid Soluble Manganese (5%)	0233	9.128	0.0880	8.393	1.289	0.1866	72	0.57	261.35	0
261	Acid Soluble Manganese (5%)	0231	9.175	0.1300	8.393	1.289	0.1866	72	0.61	261.32	0
261	Acid Soluble Manganese (5%)	0043	9.185	0.1100	8.393	1.289	0.1866	72	0.61	261.34	0
261	Acid Soluble Manganese (5%)	0368	9.192	0.2558	8.393	1.289	0.1866	72	0.62	261.99	0
261	Acid Soluble Manganese (5%)	0027	9.201	0.3270	8.393	1.289	0.1866	72	0.63	261.99	0
261	Acid Soluble Manganese (5%)	0025	9.256‡	0.2410	8.393	1.289	0.1866	72	0.67	261.35	0
261	Acid Soluble Manganese (5%)	0546	9.276‡	0.1150	8.393	1.289	0.1866	72	0.68	261.35	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				
261	Acid Soluble Manganese (5%)	0029	9.459‡	0.1200	8.393	1.289	0.1866	72	0.83	261.12	0
261	Acid Soluble Manganese (5%)	0035	9.505‡	0.9900	8.393	1.289	0.1866	72	0.86	261.30	0
261	Acid Soluble Manganese (5%)	0291	9.570‡	0.0200	8.393	1.289	0.1866	72	0.91	261.99	0
261	Acid Soluble Manganese (5%)	0105	9.639‡	0.1420	8.393	1.289	0.1866	72	0.97	261.12	0
261	Acid Soluble Manganese (5%)	0389	9.745‡	0.0100	8.393	1.289	0.1866	72	1.05	261.99	0
261	Acid Soluble Manganese (5%)	0482	9.885‡	0.4300	8.393	1.289	0.1866	72	1.16	261.31	0
261	Acid Soluble Manganese (5%)	0523	9.965‡	0.2500	8.393	1.289	0.1866	72	1.22	261.99	0
261	Acid Soluble Manganese (5%)	0423	10.02‡	0.1400	8.393	1.289	0.1866	72	1.26	261.34	0
261	Acid Soluble Manganese (5%)	0521	10.06‡	0.0000	8.393	1.289	0.1866	72	1.30	261.34	0
261	Acid Soluble Manganese (5%)	0452	10.32‡	0.0700	8.393	1.289	0.1866	72	1.49	261.30	0
261	Acid Soluble Manganese (5%)	0422	10.42‡	0.7300	8.393	1.289	0.1866	72	1.57	261.30	0
261	Acid Soluble Manganese (5%)	0515	5.090†	1.367	8.393	1.289	0.1866	72	-2.56	261.99	1
261	Acid Soluble Manganese (5%)	0041	8.950	1.300	8.393	1.289	0.1866	72	0.43	261.30	1
271	Water Soluble Manganese (%)	0444	1.440	0.0400				1		271.30	0
281	Acid Soluble Mercury (ppm)	0550	0.1400	0.0000	9.497	12.37	0.3887	9	-0.70	281.00	0
281	Acid Soluble Mercury (ppm)	0519	0.2200	0.0200	9.497	12.37	0.3887	9	-0.69	281.99	0
281	Acid Soluble Mercury (ppm)	0506	0.2700	0.0600	9.497	12.37	0.3887	9	-0.69	281.00	0
281	Acid Soluble Mercury (ppm)	0444	2.070	0.1800	9.497	12.37	0.3887	9	-0.55	281.30	0
281	Acid Soluble Mercury (ppm)	0541	2.945	1.110	9.497	12.37	0.3887	9	-0.49	281.30	0
281	Acid Soluble Mercury (ppm)	0520	12.85	0.1000	9.497	12.37	0.3887	9	0.25	281.99	0
281	Acid Soluble Mercury (ppm)	0117	14.94	0.7800	9.497	12.37	0.3887	9	0.41	281.00	0
281	Acid Soluble Mercury (ppm)	0527	23.99	0.4300	9.497	12.37	0.3887	9	1.08	281.30	0
281	Acid Soluble Mercury (ppm)	0476	31.13	0.8187	9.497	12.37	0.3887	9	1.61	281.99	0
281	Acid Soluble Mercury (ppm)	0515	0.0000	0.0000	9.497	12.37	0.3887	9		281.30	4
289	Acid Soluble Molybdenum (ppm)	0027	0.0305	0.0030	367.1	47.62	13.14	28	-7.71	289.99	0
289	Acid Soluble Molybdenum (ppm)	0521	30.71	0.0000	367.1	47.62	13.14	28	-7.06	289.30	0
289	Acid Soluble Molybdenum (ppm)	0519	168.6	0.8200	367.1	47.62	13.14	28	-4.17	289.30	0
289	Acid Soluble Molybdenum (ppm)	0550	224.5	41.00	367.1	47.62	13.14	28	-2.99	289.33	0
289	Acid Soluble Molybdenum (ppm)	0476	310.2	41.95	367.1	47.62	13.14	28	-1.19	289.99	0
289	Acid Soluble Molybdenum (ppm)	0527	328.2	8.510	367.1	47.62	13.14	28	-0.82	289.33	0
289	Acid Soluble Molybdenum (ppm)	0220	330.0	6.000	367.1	47.62	13.14	28	-0.78	289.99	0
289	Acid Soluble Molybdenum (ppm)	0506	351.5	3.000	367.1	47.62	13.14	28	-0.33	289.99	0
289	Acid Soluble Molybdenum (ppm)	0086	356.6	23.97	367.1	47.62	13.14	28	-0.22	289.33	0
289	Acid Soluble Molybdenum (ppm)	0423	363.0	2.000	367.1	47.62	13.14	28	-0.09	289.33	0
289	Acid Soluble Molybdenum (ppm)	0433	368.6	0.1000	367.1	47.62	13.14	28	0.03	289.30	0
289	Acid Soluble Molybdenum (ppm)	0096	370.0	1.400	367.1	47.62	13.14	28	0.06	289.30	0
289	Acid Soluble Molybdenum (ppm)	0368	374.0	1.232	367.1	47.62	13.14	28	0.15	289.34	0
289	Acid Soluble Molybdenum (ppm)	0515	375.9	50.33	367.1	47.62	13.14	28	0.18	289.34	0
289	Acid Soluble Molybdenum (ppm)	0546	376.4	6.400	367.1	47.62	13.14	28	0.20	289.33	0
289	Acid Soluble Molybdenum (ppm)	0541	377.0	6.000	367.1	47.62	13.14	28	0.21	289.30	0
289	Acid Soluble Molybdenum (ppm)	0494	377.6	1.672	367.1	47.62	13.14	28	0.22	289.33	0
289	Acid Soluble Molybdenum (ppm)	0117	380.1	2.800	367.1	47.62	13.14	28	0.27	289.33	0
289	Acid Soluble Molybdenum (ppm)	0049	381.5	33.00	367.1	47.62	13.14	28	0.30	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)	0035	382.5	45.00	367.1	47.62	13.14	28	0.32	289.30	0
289	Acid Soluble Molybdenum (ppm)	0037	384.2	9.908	367.1	47.62	13.14	28	0.36	289.33	0
289	Acid Soluble Molybdenum (ppm)	0230	387.5	9.000	367.1	47.62	13.14	28	0.43	289.34	0
289	Acid Soluble Molybdenum (ppm)	0524	396.3	31.55	367.1	47.62	13.14	28	0.61	289.30	0
289	Acid Soluble Molybdenum (ppm)	0233	403.0	2.700	367.1	47.62	13.14	28	0.75	289.33	0
289	Acid Soluble Molybdenum (ppm)	0515	406.9	31.45	367.1	47.62	13.14	28	0.84	289.33	0
289	Acid Soluble Molybdenum (ppm)	0106	438.0	0.0000	367.1	47.62	13.14	28	1.49	289.33	0
289	Acid Soluble Molybdenum (ppm)	0255	512.1	7.400	367.1	47.62	13.14	28	3.04	289.30	0
289	Acid Soluble Molybdenum (ppm)	0481	664.7	0.8000	367.1	47.62	13.14	28	6.25	289.99	0
291	Acid Soluble Nickel (ppm)	0444	1,318	5.000	1,700	216.6	67.77	27	-1.77	291.30	0
291	Acid Soluble Nickel (ppm)	0519	1,438	0.9600	1,700	216.6	67.77	27	-1.21	291.99	0
291	Acid Soluble Nickel (ppm)	0255	1,450	124.4	1,700	216.6	67.77	27	-1.15	291.99	0
291	Acid Soluble Nickel (ppm)	0550	1,457	212.3	1,700	216.6	67.77	27	-1.12	291.00	0
291	Acid Soluble Nickel (ppm)	0027	1,458	0.4960	1,700	216.6	67.77	27	-1.12	291.99	0
291	Acid Soluble Nickel (ppm)	0521	1,461	0.0000	1,700	216.6	67.77	27	-1.11	291.30	0
291	Acid Soluble Nickel (ppm)	0476	1,509	99.39	1,700	216.6	67.77	27	-0.88	291.99	0
291	Acid Soluble Nickel (ppm)	0523	1,550	42.90	1,700	216.6	67.77	27	-0.69	291.30	0
291	Acid Soluble Nickel (ppm)	0368	1,582	103.8	1,700	216.6	67.77	27	-0.55	291.34	0
291	Acid Soluble Nickel (ppm)	0220	1,584	33.00	1,700	216.6	67.77	27	-0.54	291.99	0
291	Acid Soluble Nickel (ppm)	0482	1,610	25.00	1,700	216.6	67.77	27	-0.42	291.30	0
291	Acid Soluble Nickel (ppm)	0086	1,689	49.35	1,700	216.6	67.77	27	-0.05	291.33	0
291	Acid Soluble Nickel (ppm)	0506	1,736	192.0	1,700	216.6	67.77	27	0.16	291.99	0
291	Acid Soluble Nickel (ppm)	0037	1,751	44.26	1,700	216.6	67.77	27	0.23	291.33	0
291	Acid Soluble Nickel (ppm)	0520	1,788	93.10	1,700	216.6	67.77	27	0.40	291.99	0
291	Acid Soluble Nickel (ppm)	0096	1,798	26.00	1,700	216.6	67.77	27	0.45	291.30	0
291	Acid Soluble Nickel (ppm)	0035	1,805	2.000	1,700	216.6	67.77	27	0.48	291.30	0
291	Acid Soluble Nickel (ppm)	0498	1,807	13.00	1,700	216.6	67.77	27	0.49	291.00	0
291	Acid Soluble Nickel (ppm)	0524	1,809	43.21	1,700	216.6	67.77	27	0.50	291.30	0
291	Acid Soluble Nickel (ppm)	0541	1,810	60.00	1,700	216.6	67.77	27	0.51	291.30	0
291	Acid Soluble Nickel (ppm)	0481	1,827	23.00	1,700	216.6	67.77	27	0.58	291.99	0
291	Acid Soluble Nickel (ppm)	0494	1,840	56.55	1,700	216.6	67.77	27	0.65	291.33	0
291	Acid Soluble Nickel (ppm)	0233	1,888	211.0	1,700	216.6	67.77	27	0.86	291.33	0
291	Acid Soluble Nickel (ppm)	0117	1,899	6.000	1,700	216.6	67.77	27	0.92	291.33	0
291	Acid Soluble Nickel (ppm)	0230	1,965	250.0	1,700	216.6	67.77	27	1.22	291.34	0
291	Acid Soluble Nickel (ppm)	0527	1,998	1.000	1,700	216.6	67.77	27	1.38	291.33	0
291	Acid Soluble Nickel (ppm)	0515	2,091	112.0	1,700	216.6	67.77	27	1.80	291.33	0
291	Acid Soluble Nickel (ppm)	0515	2,397	443.3	1,700	216.6	67.77	27	3.21	291.34	1
301	Acid Soluble Selenium (ppm)	0027	0.0020	0.0000	25.36	27.20	2.781	17	-0.93	301.99	0
301	Acid Soluble Selenium (ppm)	0481	0.3750	0.0500	25.36	27.20	2.781	17	-0.92	301.99	0
301	Acid Soluble Selenium (ppm)	0476	1.703	0.1709	25.36	27.20	2.781	17	-0.87	301.99	0
301	Acid Soluble Selenium (ppm)	0550	3.080	3.020	25.36	27.20	2.781	17	-0.82	301.00	0
301	Acid Soluble Selenium (ppm)	0527	4.525	0.2100	25.36	27.20	2.781	17	-0.77	301.33	0
301	Acid Soluble Selenium (ppm)	0255	6.721	3.459	25.36	27.20	2.781	17	-0.69	301.99	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				
301	Acid Soluble Selenium (ppm)	0519	8.515	0.0300	25.36	27.20	2.781	17	-0.62	301.99	0
301	Acid Soluble Selenium (ppm)	0230	14.35	0.3000	25.36	27.20	2.781	17	-0.40	301.34	0
301	Acid Soluble Selenium (ppm)	0541	19.75	2.500	25.36	27.20	2.781	17	-0.21	301.30	0
301	Acid Soluble Selenium (ppm)	0233	20.90	9.650	25.36	27.20	2.781	17	-0.16	301.33	0
301	Acid Soluble Selenium (ppm)	0515	31.44	0.7650	25.36	27.20	2.781	17	0.22	301.34	0
301	Acid Soluble Selenium (ppm)	0520	33.22	2.960	25.36	27.20	2.781	17	0.29	301.99	0
301	Acid Soluble Selenium (ppm)	0524	40.83	3.000	25.36	27.20	2.781	17	0.57	301.30	0
301	Acid Soluble Selenium (ppm)	0037	54.79	1.124	25.36	27.20	2.781	17	1.08	301.33	0
301	Acid Soluble Selenium (ppm)	0523	58.65	0.8400	25.36	27.20	2.781	17	1.22	301.30	0
301	Acid Soluble Selenium (ppm)	0220	67.50	17.00	25.36	27.20	2.781	17	1.55	301.99	0
301	Acid Soluble Selenium (ppm)	0494	68.70	2.202	25.36	27.20	2.781	17	1.59	301.33	0
301	Acid Soluble Selenium (ppm)	0368	42.00	28.53	25.36	27.20	2.781	17	0.61	301.34	1
301	Acid Soluble Selenium (ppm)	0515	5.651	11.30	25.36	27.20	2.781	17		301.33	4
311	Sodium (%)	0494	0.9460	0.0065	1.057	0.0613	0.0429	13	-1.81	311.33	0
311	Sodium (%)	0035	0.9710	0.0780	1.057	0.0613	0.0429	13	-1.40	311.33	0
311	Sodium (%)	0354	1.020	0.0400	1.057	0.0613	0.0429	13	-0.60	311.99	0
311	Sodium (%)	0096	1.025	0.0100	1.057	0.0613	0.0429	13	-0.52	311.99	0
311	Sodium (%)	0025	1.036	0.0590	1.057	0.0613	0.0429	13	-0.35	311.33	0
311	Sodium (%)	0086	1.045	0.0817	1.057	0.0613	0.0429	13	-0.19	311.33	0
311	Sodium (%)	0521	1.055	0.0000	1.057	0.0613	0.0429	13	-0.03	311.32	0
311	Sodium (%)	0482	1.065	0.0700	1.057	0.0613	0.0429	13	0.13	311.99	0
311	Sodium (%)	0493	1.090	0.0200	1.057	0.0613	0.0429	13	0.54	311.33	0
311	Sodium (%)	0546	1.103	0.0004	1.057	0.0613	0.0429	13	0.76	311.33	0
311	Sodium (%)	0527	1.110	0.1400	1.057	0.0613	0.0429	13	0.87	311.33	0
311	Sodium (%)	0423	1.115	0.0300	1.057	0.0613	0.0429	13	0.95	311.33	0
311	Sodium (%)	0117	1.139	0.0220	1.057	0.0613	0.0429	13	1.34	311.33	0
321	Acid Soluble Zinc (20%)	0542	13.01†	0.0600	20.05	1.172	0.4111	77	-6.01	321.32	0
321	Acid Soluble Zinc (20%)	0493	15.40†	0.2000	20.05	1.172	0.4111	77	-3.97	321.33	0
321	Acid Soluble Zinc (20%)	0483	15.45†	0.5000	20.05	1.172	0.4111	77	-3.92	321.30	0
321	Acid Soluble Zinc (20%)	0402	15.77†	0.0700	20.05	1.172	0.4111	77	-3.66	321.30	0
321	Acid Soluble Zinc (20%)	0486	16.18†	0.1700	20.05	1.172	0.4111	77	-3.31	321.33	0
321	Acid Soluble Zinc (20%)	0485	18.29†	0.4500	20.05	1.172	0.4111	77	-1.50	321.00	0
321	Acid Soluble Zinc (20%)	0476	18.37†	1.792	20.05	1.172	0.4111	77	-1.43	321.99	0
321	Acid Soluble Zinc (20%)	0472	18.48†	0.9500	20.05	1.172	0.4111	77	-1.34	321.30	0
321	Acid Soluble Zinc (20%)	0405	18.55†	0.3000	20.05	1.172	0.4111	77	-1.28	321.99	0
321	Acid Soluble Zinc (20%)	0102	18.60†	0.0000	20.05	1.172	0.4111	77	-1.24	321.30	0
321	Acid Soluble Zinc (20%)	0444	18.70†	0.2600	20.05	1.172	0.4111	77	-1.15	321.30	0
321	Acid Soluble Zinc (20%)	0482	19.00†	0.2000	20.05	1.172	0.4111	77	-0.89	321.30	0
321	Acid Soluble Zinc (20%)	0550	19.07	2.320	20.05	1.172	0.4111	77	-0.83	321.00	0
321	Acid Soluble Zinc (20%)	0324	19.18	0.3300	20.05	1.172	0.4111	77	-0.74	321.30	0
321	Acid Soluble Zinc (20%)	0506	19.20	0.2000	20.05	1.172	0.4111	77	-0.72	321.99	0
321	Acid Soluble Zinc (20%)	0040	19.22	0.2230	20.05	1.172	0.4111	77	-0.71	321.00	0
321	Acid Soluble Zinc (20%)	0433	19.25	0.1000	20.05	1.172	0.4111	77	-0.68	321.30	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				
321	Acid Soluble Zinc (20%)	0498	19.28	0.5500	20.05	1.172	0.4111	77	-0.66	321.00	0
321	Acid Soluble Zinc (20%)	0049	19.37	0.3581	20.05	1.172	0.4111	77	-0.58	321.30	0
321	Acid Soluble Zinc (20%)	0086	19.44	1.180	20.05	1.172	0.4111	77	-0.52	321.33	0
321	Acid Soluble Zinc (20%)	0029	19.51	0.2700	20.05	1.172	0.4111	77	-0.46	321.00	0
321	Acid Soluble Zinc (20%)	0096	19.51	0.1568	20.05	1.172	0.4111	77	-0.46	321.30	0
321	Acid Soluble Zinc (20%)	0136	19.52	0.9400	20.05	1.172	0.4111	77	-0.45	321.33	0
321	Acid Soluble Zinc (20%)	0552	19.54	0.2200	20.05	1.172	0.4111	77	-0.43	321.30	0
321	Acid Soluble Zinc (20%)	0292	19.56	0.2000	20.05	1.172	0.4111	77	-0.42	321.30	0
321	Acid Soluble Zinc (20%)	0513	19.57	0.0600	20.05	1.172	0.4111	77	-0.41	321.00	0
321	Acid Soluble Zinc (20%)	0524	19.59	0.0259	20.05	1.172	0.4111	77	-0.39	321.99	0
321	Acid Soluble Zinc (20%)	0037	19.62	0.2110	20.05	1.172	0.4111	77	-0.36	321.33	0
321	Acid Soluble Zinc (20%)	0371	19.70	0.1800	20.05	1.172	0.4111	77	-0.30	321.30	0
321	Acid Soluble Zinc (20%)	0233	19.73	0.2900	20.05	1.172	0.4111	77	-0.28	321.33	0
321	Acid Soluble Zinc (20%)	0481	19.85	0.0300	20.05	1.172	0.4111	77	-0.17	321.99	0
321	Acid Soluble Zinc (20%)	0532	19.85	0.2200	20.05	1.172	0.4111	77	-0.17	321.00	0
321	Acid Soluble Zinc (20%)	0533	19.85	0.1000	20.05	1.172	0.4111	77	-0.17	321.00	0
321	Acid Soluble Zinc (20%)	0539	19.87	0.0400	20.05	1.172	0.4111	77	-0.15	321.00	0
321	Acid Soluble Zinc (20%)	0540	19.90	0.0500	20.05	1.172	0.4111	77	-0.13	321.00	0
321	Acid Soluble Zinc (20%)	0537	19.90	0.0200	20.05	1.172	0.4111	77	-0.13	321.00	0
321	Acid Soluble Zinc (20%)	0177	19.91	0.0304	20.05	1.172	0.4111	77	-0.12	321.33	0
321	Acid Soluble Zinc (20%)	0117	19.99	0.0900	20.05	1.172	0.4111	77	-0.05	321.33	0
321	Acid Soluble Zinc (20%)	0531	19.99	0.1200	20.05	1.172	0.4111	77	-0.05	321.00	0
321	Acid Soluble Zinc (20%)	0535	20.00	0.2000	20.05	1.172	0.4111	77	-0.04	321.00	0
321	Acid Soluble Zinc (20%)	0551	20.03	0.1500	20.05	1.172	0.4111	77	-0.02	321.00	0
321	Acid Soluble Zinc (20%)	0519	20.04	0.0900	20.05	1.172	0.4111	77	-0.01	321.99	0
321	Acid Soluble Zinc (20%)	0169	20.06	0.1600	20.05	1.172	0.4111	77	0.01	321.00	0
321	Acid Soluble Zinc (20%)	0536	20.10	0.4000	20.05	1.172	0.4111	77	0.04	321.00	0
321	Acid Soluble Zinc (20%)	0073	20.19	0.0200	20.05	1.172	0.4111	77	0.12	321.30	0
321	Acid Soluble Zinc (20%)	0291	20.23	0.0100	20.05	1.172	0.4111	77	0.15	321.99	0
321	Acid Soluble Zinc (20%)	0105	20.24	0.6000	20.05	1.172	0.4111	77	0.16	321.00	0
321	Acid Soluble Zinc (20%)	0494	20.27	0.2442	20.05	1.172	0.4111	77	0.19	321.33	0
321	Acid Soluble Zinc (20%)	0234	20.30	0.2000	20.05	1.172	0.4111	77	0.22	321.30	0
321	Acid Soluble Zinc (20%)	0307	20.36	0.2500	20.05	1.172	0.4111	77	0.26	321.30	0
321	Acid Soluble Zinc (20%)	0389	20.36	0.0800	20.05	1.172	0.4111	77	0.27	321.99	0
321	Acid Soluble Zinc (20%)	0368	20.38	0.2775	20.05	1.172	0.4111	77	0.28	321.99	0
321	Acid Soluble Zinc (20%)	0527	20.39	0.0700	20.05	1.172	0.4111	77	0.29	321.33	0
321	Acid Soluble Zinc (20%)	0042	20.48	0.7100	20.05	1.172	0.4111	77	0.36	321.99	0
321	Acid Soluble Zinc (20%)	0518	20.50	0.2000	20.05	1.172	0.4111	77	0.39	321.99	0
321	Acid Soluble Zinc (20%)	0521	20.56	0.0000	20.05	1.172	0.4111	77	0.44	321.32	0
321	Acid Soluble Zinc (20%)	0034	20.59	0.6700	20.05	1.172	0.4111	77	0.46	321.33	0
321	Acid Soluble Zinc (20%)	0025	20.62	0.3200	20.05	1.172	0.4111	77	0.49	321.33	0
321	Acid Soluble Zinc (20%)	0055	20.74	0.6100	20.05	1.172	0.4111	77	0.59	321.33	0
321	Acid Soluble Zinc (20%)	0354	20.80	0.4000	20.05	1.172	0.4111	77	0.64	321.30	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				
321	Acid Soluble Zinc (20%)	0534	20.90	0.0000	20.05	1.172	0.4111	77	0.73	321.00	0
321	Acid Soluble Zinc (20%)	0501	20.90	0.0000	20.05	1.172	0.4111	77	0.73	321.99	0
321	Acid Soluble Zinc (20%)	0027	21.12‡	0.0990	20.05	1.172	0.4111	77	0.92	321.99	0
321	Acid Soluble Zinc (20%)	0523	21.22‡	0.0700	20.05	1.172	0.4111	77	1.00	321.99	0
321	Acid Soluble Zinc (20%)	0546	21.27‡	0.1600	20.05	1.172	0.4111	77	1.04	321.33	0
321	Acid Soluble Zinc (20%)	0035	21.30‡	3.000	20.05	1.172	0.4111	77	1.07	321.30	0
321	Acid Soluble Zinc (20%)	0106	21.55‡	0.9210	20.05	1.172	0.4111	77	1.28	321.33	0
321	Acid Soluble Zinc (20%)	0360	21.61‡	0.3600	20.05	1.172	0.4111	77	1.33	321.30	0
321	Acid Soluble Zinc (20%)	0515	21.88‡	1.406	20.05	1.172	0.4111	77	1.57	321.33	0
321	Acid Soluble Zinc (20%)	0043	22.11‡	0.8100	20.05	1.172	0.4111	77	1.76	321.32	0
321	Acid Soluble Zinc (20%)	0390	22.13‡	0.0400	20.05	1.172	0.4111	77	1.78	321.30	0
321	Acid Soluble Zinc (20%)	0325	22.40‡	0.0000	20.05	1.172	0.4111	77	2.01	321.30	0
321	Acid Soluble Zinc (20%)	0041	22.50‡	3.200	20.05	1.172	0.4111	77	2.09	321.30	0
321	Acid Soluble Zinc (20%)	0231	22.74‡	0.3900	20.05	1.172	0.4111	77	2.29	321.30	0
321	Acid Soluble Zinc (20%)	0452	23.67‡	0.0800	20.05	1.172	0.4111	77	3.09	321.30	0
321	Acid Soluble Zinc (20%)	0255	23.92‡	1.287	20.05	1.172	0.4111	77	3.30	321.30	0
321	Acid Soluble Zinc (20%)	0423	24.55‡	0.7000	20.05	1.172	0.4111	77	3.84	321.32	0
321	Acid Soluble Zinc (20%)	0422	21.95‡	4.030	20.05	1.172	0.4111	77	1.62	321.30	1
321	Acid Soluble Zinc (20%)	0515	24.38‡	7.523	20.05	1.172	0.4111	77	3.70	321.99	1
321	Acid Soluble Zinc (20%)	0230	1.960†	0.0000	20.05	1.172	0.4111	77	-15.44	321.30	2
325	Water Soluble Zinc (%)	0444	5.905	0.0300	11.53	7.336	0.2600	3	-0.77	325.30	0
325	Water Soluble Zinc (%)	0518	8.850	0.1000	11.53	7.336	0.2600	3	-0.36	325.99	0
325	Water Soluble Zinc (%)	0541	19.83	0.6500	11.53	7.336	0.2600	3	1.13	325.30	0

Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or -2 and -3 (warning) and Green = Z < 2 and >-2 (OK at 95%). Flags indicate data usage: 0 = Used, 1 = rejected for duplicates too far apart, 2 = rejected as extreme outlier, 3 = removed from stats, 4 = rejected due to 0s submitted and 5 = LOD. A 9 flag indicates a data problem - scores not calculated. Robust statistics not used if < 6 labs used in calculations, in this case the Z Scores are grey and included for information only. Your offset values are higher (‡) or lower (†) than the Robust Analyte value ± Investigational Allowance. 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.