

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Analyte Proficiency From All Labs

Sample # 170811

Grade 21-0-5

### Statistical Summary

# Analytes: 37

# Labs Reporting: 97

Issue Date : 09/30/2017

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 (%)	33	33	3.007	0.2873	2.997		0.2289	0.0498	7.64%		0.0568	3.39%
003	Water Insoluble Nitrogen (%)	8	8	11.24	4.001	12.47		0.8073	0.3568	6.47%		0.2713	2.74%
005	Urea Nitrogen (%)	8	8	4.211	6.011	2.922		3.279	1.449	112.21%		0.1179	3.40%
007	Urea (%)	4	4	1.351	1.111	1.351		1.111	0.6946	82.25%		0.0275	3.82%
009	Ammoniacal Plus Nitrate Nitrogen (%)	2	2	7.095	4.179								
010	Total Nitrogen (21%)	85	82	21.01	0.5577	21.05	0.7405	0.3075	0.0424	1.46%	1.76%	0.1541	2.53%
020	Total Phosphorus as P2O5 (%)	10	9	0.1385	0.2685	0.0579		0.0545	0.0227	94.16%		0.0269	6.14%
030	Citrate Insoluble Phosphorus as P2O5 (%)	1		0.1050									
040	Indirect Available Phosphorus as P2O5 (5%)	1		0.0400									
041	Direct Available Phosphorus as P2O5 (5%)	7	4	0.0401	0.0403	0.0401	0.6700	0.0403	0.0252	100.42%	834.89%	0.0073	6.49%
048	Water Soluble Phosphorus as P2O5 (%)	1		0.0650									
050	Soluble Potassium as K2O (%)	94	91	5.125	0.3340	5.096		0.1878	0.0246	3.69%		0.1131	3.13%
060	Water (Free) (%)	8	7	1.539	0.2276	1.511		0.1895	0.0895	12.54%		0.0105	3.76%
101	Acid Soluble Calcium (%)	17	17	6.730	0.4292	6.730		0.4868	0.1476	7.23%		0.1832	3.00%
121	Acid Soluble Magnesium (%)	21	21	2.618	0.1780	2.613		0.1894	0.0517	7.25%		0.0559	3.46%
143	Elemental Sulfur (%)	3	3	5.392	0.1831	5.392		0.1831	0.1322	3.40%		0.0593	3.10%
145	Sulfate Sulfur, HCl soluble (%)	11	11	5.663	0.9541	5.412		0.2180	0.0822	4.03%		0.1183	3.10%
146	Total Sulfur in Liquid (%)	1		5.505									
148	Total Sulfur (8.6%)	46	44	5.526	0.8055	5.343	0.4671	0.2401	0.0453	4.49%	4.37%	0.1174	3.11%
149	Sulfur - HNO3 soluble (%)	3	3	5.314	0.2530	5.314		0.2530	0.1826	4.76%		0.0670	3.11%
151	Acid Soluble Arsenic (ppm)	15	13	1.785	1.627	1.347		0.6352	0.2202	47.17%		0.3228	15.30%
165	Acid Soluble Boron (%)	9	7	0.0055	0.0077	0.0039		0.0044	0.0021	112.66%		0.0010	9.22%
181	Acid Soluble Cadmium (ppm)	18	13	0.2493	0.1000	0.2405		0.0904	0.0314	37.61%		0.0276	19.82%
190	Water Soluble Chlorine (%)	1		0.0550									
191	Acid Soluble Chromium (ppm)	23	22	99.72	17.90	101.7		15.49	4.128	15.23%		2.910	7.98%
202	Acid Soluble Cobalt (ppm)	22	22	12.55	3.491	12.81		3.344	0.8911	26.11%		0.9649	10.90%
221	Acid Soluble Copper (%)	35	34	2.265	13.16	0.0084		0.0011	0.0002	13.06%		0.0963	8.20%
241	Acid Soluble Iron (1%)	64	63	1.059	0.2152	1.097	0.1147	0.1251	0.0197	11.40%	5.23%	0.0410	3.94%
251	Acid Soluble Lead (ppm)	23	22	3.157	1.170	3.267		1.054	0.2809	32.26%		0.4352	13.39%
261	Acid Soluble Manganese (%)	21	20	0.0366	0.0052	0.0375		0.0035	0.0010	9.22%		0.0025	6.56%
281	Acid Soluble Mercury (ppm)	3	1	0.0041		0.0375		0.0035	0.0043	9.22%		0.0004	26.22%

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
289	Acid Soluble Molybdenum (ppm)	24	24	9.709	2.786	9.702		2.515	0.6417	25.92%		0.7744	11.36%
291	Acid Soluble Nickel (ppm)	27	26	52.56	12.85	53.54		12.20	2.992	22.79%		2.241	8.79%
301	Acid Soluble Selenium (ppm)	10	5	0.1138	0.0960	0.1138		0.0960	0.0537	84.39%		0.0492	22.19%
311	Sodium (%)	10	10	0.0585	0.0402	0.0467		0.0159	0.0063	34.05%		0.0050	6.34%
321	Acid Soluble Zinc (%)	37	36	0.0657	0.1907	0.0337		0.0038	0.0008	11.39%		0.0031	6.66%
325	Water Soluble Zinc (%)	1		0.0350									

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# Analytes: 37

Sample # 170811

Lab Values

# Labs Reporting: 97

Grade 21-0-5

Issue Date : 09/30/2017

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 (%)	0309	2.290	0.0000	2.997	0.2289	0.0568	33	-3.09	001.10	0
001	Ammoniacal Nitrogen (%)	0231	2.475	0.0300	2.997	0.2289	0.0568	33	-2.28	001.99	0
001	Ammoniacal Nitrogen (%)	0368	2.795	0.0900	2.997	0.2289	0.0568	33	-0.88	001.99	0
001	Ammoniacal Nitrogen (%)	0536	2.795	0.2300	2.997	0.2289	0.0568	33	-0.88	001.99	0
001	Ammoniacal Nitrogen (%)	0532	2.800	0.0400	2.997	0.2289	0.0568	33	-0.86	001.99	0
001	Ammoniacal Nitrogen (%)	0526	2.805	0.0100	2.997	0.2289	0.0568	33	-0.84	001.10	0
001	Ammoniacal Nitrogen (%)	0415	2.818	0.0001	2.997	0.2289	0.0568	33	-0.79	001.99	0
001	Ammoniacal Nitrogen (%)	0394	2.820	0.0240	2.997	0.2289	0.0568	33	-0.77	001.99	0
001	Ammoniacal Nitrogen (%)	0230	2.830	0.2000	2.997	0.2289	0.0568	33	-0.73	001.10	0
001	Ammoniacal Nitrogen (%)	0027	2.830	0.1200	2.997	0.2289	0.0568	33	-0.73	001.99	0
001	Ammoniacal Nitrogen (%)	0533	2.870	0.0200	2.997	0.2289	0.0568	33	-0.56	001.99	0
001	Ammoniacal Nitrogen (%)	0535	2.900	0.0000	2.997	0.2289	0.0568	33	-0.43	001.99	0
001	Ammoniacal Nitrogen (%)	0535	2.905	0.0100	2.997	0.2289	0.0568	33	-0.40	001.10	0
001	Ammoniacal Nitrogen (%)	0540	2.915	0.0100	2.997	0.2289	0.0568	33	-0.36	001.99	0
001	Ammoniacal Nitrogen (%)	0538	2.920	0.0800	2.997	0.2289	0.0568	33	-0.34	001.99	0
001	Ammoniacal Nitrogen (%)	0539	2.935	0.0300	2.997	0.2289	0.0568	33	-0.27	001.99	0
001	Ammoniacal Nitrogen (%)	0177	2.971	0.0163	2.997	0.2289	0.0568	33	-0.12	001.10	0
001	Ammoniacal Nitrogen (%)	0529	2.990	0.1800	2.997	0.2289	0.0568	33	-0.03	001.99	0
001	Ammoniacal Nitrogen (%)	0537	2.995	0.0700	2.997	0.2289	0.0568	33	-0.01	001.99	0
001	Ammoniacal Nitrogen (%)	0397	3.030	0.0600	2.997	0.2289	0.0568	33	0.14	001.99	0
001	Ammoniacal Nitrogen (%)	0200	3.055	0.1100	2.997	0.2289	0.0568	33	0.25	001.99	0
001	Ammoniacal Nitrogen (%)	0524	3.070	0.1200	2.997	0.2289	0.0568	33	0.32	001.99	0
001	Ammoniacal Nitrogen (%)	0096	3.080	0.0200	2.997	0.2289	0.0568	33	0.36	001.99	0
001	Ammoniacal Nitrogen (%)	0510	3.088	0.0274	2.997	0.2289	0.0568	33	0.40	001.99	0
001	Ammoniacal Nitrogen (%)	0501	3.096	0.0120	2.997	0.2289	0.0568	33	0.43	001.99	0
001	Ammoniacal Nitrogen (%)	0255	3.145	0.0300	2.997	0.2289	0.0568	33	0.64	001.99	0
001	Ammoniacal Nitrogen (%)	0486	3.235	0.1500	2.997	0.2289	0.0568	33	1.04	001.10	0
001	Ammoniacal Nitrogen (%)	0522	3.260	0.0400	2.997	0.2289	0.0568	33	1.15	001.99	0
001	Ammoniacal Nitrogen (%)	0444	3.290	0.0000	2.997	0.2289	0.0568	33	1.28	001.10	0
001	Ammoniacal Nitrogen (%)	0506	3.415	0.0500	2.997	0.2289	0.0568	33	1.82	001.99	0
001	Ammoniacal Nitrogen (%)	0405	3.489	0.0830	2.997	0.2289	0.0568	33	2.15	001.10	0
001	Ammoniacal Nitrogen (%)	0220	3.645	0.0100	2.997	0.2289	0.0568	33	2.83	001.99	0
001	Ammoniacal Nitrogen (%)	0371	3.660	0.0000	2.997	0.2289	0.0568	33	2.89	001.99	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				
003	Water Insoluble Nitrogen (%)	0230	1.420	0.0800	12.47	0.8073	0.2713	8	-12.52	003.10	0
003	Water Insoluble Nitrogen (%)	0486	11.91	0.6100	12.47	0.8073	0.2713	8	-0.64	003.99	0
003	Water Insoluble Nitrogen (%)	0029	12.15	0.6100	12.47	0.8073	0.2713	8	-0.37	003.10	0
003	Water Insoluble Nitrogen (%)	0356	12.24	0.6100	12.47	0.8073	0.2713	8	-0.27	003.10	0
003	Water Insoluble Nitrogen (%)	0220	12.77	0.0500	12.47	0.8073	0.2713	8	0.34	003.10	0
003	Water Insoluble Nitrogen (%)	0027	12.87	0.0800	12.47	0.8073	0.2713	8	0.45	003.10	0
003	Water Insoluble Nitrogen (%)	0500	13.20	0.0000	12.47	0.8073	0.2713	8	0.83	003.99	0
003	Water Insoluble Nitrogen (%)	0494	13.38	0.1300	12.47	0.8073	0.2713	8	1.03	003.10	0
005	Urea Nitrogen (%)	0444	0.5300	0.0400	2.922	3.279	0.1179	8	-0.67	005.00	0
005	Urea Nitrogen (%)	0524	0.7071	0.0232	2.922	3.279	0.1179	8	-0.62	005.99	0
005	Urea Nitrogen (%)	0029	1.260	0.0400	2.922	3.279	0.1179	8	-0.46	005.99	0
005	Urea Nitrogen (%)	0368	1.295	0.0500	2.922	3.279	0.1179	8	-0.45	005.00	0
005	Urea Nitrogen (%)	0230	1.535	0.0700	2.922	3.279	0.1179	8	-0.39	005.00	0
005	Urea Nitrogen (%)	0309	3.255	0.3500	2.922	3.279	0.1179	8	0.09	005.99	0
005	Urea Nitrogen (%)	0027	6.955	0.0700	2.922	3.279	0.1179	8	1.12	005.00	0
005	Urea Nitrogen (%)	0506	18.15	0.3000	2.922	3.279	0.1179	8	4.25	005.99	0
007	Urea (%)	0220	0.4950	0.0100	1.351	1.111	0.0275	4	-0.77	007.99	0
007	Urea (%)	0486	0.7500	0.0000	1.351	1.111	0.0275	4	-0.54	007.99	0
007	Urea (%)	0394	1.200	0.0000	1.351	1.111	0.0275	4	-0.14	007.99	0
007	Urea (%)	0117	2.960	0.1000	1.351	1.111	0.0275	4	1.45	007.99	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0444	4.140	0.0400				2		009.10	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0518	10.05	0.5000				2		009.99	0
010	Total Nitrogen (21%)	0444	16.82*	0.0800	21.05	0.3075	0.1541	82	-13.74	010.60	0
010	Total Nitrogen (21%)	0230	20.40	0.2000	21.05	0.3075	0.1541	82	-2.10	010.60	0
010	Total Nitrogen (21%)	0102	20.54	0.4000	21.05	0.3075	0.1541	82	-1.64	010.60	0
010	Total Nitrogen (21%)	0529	20.55	0.2300	21.05	0.3075	0.1541	82	-1.63	010.99	0
010	Total Nitrogen (21%)	0397	20.56	0.0200	21.05	0.3075	0.1541	82	-1.58	010.12	0
010	Total Nitrogen (21%)	0114	20.61	0.0500	21.05	0.3075	0.1541	82	-1.43	010.11	0
010	Total Nitrogen (21%)	0451	20.64	0.3500	21.05	0.3075	0.1541	82	-1.34	010.60	0
010	Total Nitrogen (21%)	0220	20.64	0.2800	21.05	0.3075	0.1541	82	-1.32	010.11	0
010	Total Nitrogen (21%)	0472	20.64	0.0200	21.05	0.3075	0.1541	82	-1.32	010.60	0
010	Total Nitrogen (21%)	0423	20.65	0.1000	21.05	0.3075	0.1541	82	-1.29	010.60	0
010	Total Nitrogen (21%)	0493	20.65	0.1000	21.05	0.3075	0.1541	82	-1.29	010.99	0
010	Total Nitrogen (21%)	0394	20.68	0.0000	21.05	0.3075	0.1541	82	-1.19	010.99	0
010	Total Nitrogen (21%)	0043	20.69	0.0600	21.05	0.3075	0.1541	82	-1.16	010.60	0
010	Total Nitrogen (21%)	0255	20.71	0.6180	21.05	0.3075	0.1541	82	-1.11	010.60	0
010	Total Nitrogen (21%)	0368	20.71	0.3480	21.05	0.3075	0.1541	82	-1.10	010.60	0
010	Total Nitrogen (21%)	0513	20.72	0.0900	21.05	0.3075	0.1541	82	-1.08	010.99	0
010	Total Nitrogen (21%)	0510	20.79	0.0362	21.05	0.3075	0.1541	82	-0.84	010.11	0
010	Total Nitrogen (21%)	0476	20.79	0.4363	21.05	0.3075	0.1541	82	-0.84	010.99	0
010	Total Nitrogen (21%)	0482	20.80	0.2000	21.05	0.3075	0.1541	82	-0.80	010.60	0
010	Total Nitrogen (21%)	0500	20.81	0.0200	21.05	0.3075	0.1541	82	-0.77	010.11	0
010	Total Nitrogen (21%)	0389	20.83	0.2200	21.05	0.3075	0.1541	82	-0.70	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 (21%)	0524	20.86	0.1314	21.05	0.3075	0.1541	82	-0.62	010.99	0
010	Total Nitrogen (21%)	0522	20.88	0.0300	21.05	0.3075	0.1541	82	-0.55	010.99	0
010	Total Nitrogen (21%)	0325	20.90	0.2000	21.05	0.3075	0.1541	82	-0.47	010.60	0
010	Total Nitrogen (21%)	0177	20.93	0.1600	21.05	0.3075	0.1541	82	-0.38	010.60	0
010	Total Nitrogen (21%)	0231	20.94	0.0400	21.05	0.3075	0.1541	82	-0.34	010.60	0
010	Total Nitrogen (21%)	0157	20.95	0.1000	21.05	0.3075	0.1541	82	-0.31	010.60	0
010	Total Nitrogen (21%)	0534	20.97	0.0300	21.05	0.3075	0.1541	82	-0.26	010.12	0
010	Total Nitrogen (21%)	0136	20.99	0.0600	21.05	0.3075	0.1541	82	-0.18	010.60	0
010	Total Nitrogen (21%)	0523	21.00	0.0000	21.05	0.3075	0.1541	82	-0.15	010.60	0
010	Total Nitrogen (21%)	0041	21.01	0.3300	21.05	0.3075	0.1541	82	-0.13	010.60	0
010	Total Nitrogen (21%)	0131	21.01	0.0960	21.05	0.3075	0.1541	82	-0.12	010.60	0
010	Total Nitrogen (21%)	0501	21.01	0.0960	21.05	0.3075	0.1541	82	-0.12	010.60	0
010	Total Nitrogen (21%)	0415	21.02	0.0125	21.05	0.3075	0.1541	82	-0.09	010.12	0
010	Total Nitrogen (21%)	0533	21.02	0.0200	21.05	0.3075	0.1541	82	-0.08	010.99	0
010	Total Nitrogen (21%)	0137	21.04	0.0340	21.05	0.3075	0.1541	82	-0.02	010.60	0
010	Total Nitrogen (21%)	0416	21.05	0.0100	21.05	0.3075	0.1541	82	0.00	010.12	0
010	Total Nitrogen (21%)	0535	21.05	0.1000	21.05	0.3075	0.1541	82	0.01	010.11	0
010	Total Nitrogen (21%)	0095	21.06	0.1300	21.05	0.3075	0.1541	82	0.03	010.60	0
010	Total Nitrogen (21%)	0377	21.06	0.1900	21.05	0.3075	0.1541	82	0.03	010.60	0
010	Total Nitrogen (21%)	0486	21.06	0.1100	21.05	0.3075	0.1541	82	0.03	010.60	0
010	Total Nitrogen (21%)	0508	21.06	0.0520	21.05	0.3075	0.1541	82	0.04	010.99	0
010	Total Nitrogen (21%)	0483	21.06	0.0400	21.05	0.3075	0.1541	82	0.05	010.60	0
010	Total Nitrogen (21%)	0360	21.06	0.2400	21.05	0.3075	0.1541	82	0.05	010.60	0
010	Total Nitrogen (21%)	0234	21.08	0.0100	21.05	0.3075	0.1541	82	0.10	010.60	0
010	Total Nitrogen (21%)	0537	21.08	0.0800	21.05	0.3075	0.1541	82	0.11	010.99	0
010	Total Nitrogen (21%)	0532	21.09	0.0300	21.05	0.3075	0.1541	82	0.13	010.99	0
010	Total Nitrogen (21%)	0291	21.10	0.0100	21.05	0.3075	0.1541	82	0.16	010.60	0
010	Total Nitrogen (21%)	0055	21.10	0.3600	21.05	0.3075	0.1541	82	0.18	010.60	0
010	Total Nitrogen (21%)	0536	21.12	0.1600	21.05	0.3075	0.1541	82	0.24	010.11	0
010	Total Nitrogen (21%)	0452	21.13	0.0700	21.05	0.3075	0.1541	82	0.26	010.60	0
010	Total Nitrogen (21%)	0027	21.15	0.1000	21.05	0.3075	0.1541	82	0.34	010.60	0
010	Total Nitrogen (21%)	0354	21.16	0.1810	21.05	0.3075	0.1541	82	0.38	010.60	0
010	Total Nitrogen (21%)	0035	21.18	0.0500	21.05	0.3075	0.1541	82	0.42	010.60	0
010	Total Nitrogen (21%)	0402	21.18	0.1700	21.05	0.3075	0.1541	82	0.42	010.60	0
010	Total Nitrogen (21%)	0406	21.19	0.0900	21.05	0.3075	0.1541	82	0.45	010.60	0
010	Total Nitrogen (21%)	0049	21.19	0.1200	21.05	0.3075	0.1541	82	0.47	010.60	0
010	Total Nitrogen (21%)	0086	21.19	0.1550	21.05	0.3075	0.1541	82	0.48	010.60	0
010	Total Nitrogen (21%)	0538	21.20	0.0500	21.05	0.3075	0.1541	82	0.49	010.11	0
010	Total Nitrogen (21%)	0527	21.20	0.1780	21.05	0.3075	0.1541	82	0.50	010.60	0
010	Total Nitrogen (21%)	0023	21.20	0.0810	21.05	0.3075	0.1541	82	0.50	010.60	0
010	Total Nitrogen (21%)	0539	21.23	0.0500	21.05	0.3075	0.1541	82	0.58	010.11	0
010	Total Nitrogen (21%)	0540	21.23	0.1500	21.05	0.3075	0.1541	82	0.58	010.11	0
010	Total Nitrogen (21%)	0037	21.23	0.2910	21.05	0.3075	0.1541	82	0.59	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 (21%)	0042	21.23	0.1200	21.05	0.3075	0.1541	82	0.60	010.60	0
010	Total Nitrogen (21%)	0070	21.27	0.2300	21.05	0.3075	0.1541	82	0.71	010.60	0
010	Total Nitrogen (21%)	0356	21.27	0.2500	21.05	0.3075	0.1541	82	0.71	010.60	0
010	Total Nitrogen (21%)	0029	21.30	0.2500	21.05	0.3075	0.1541	82	0.81	010.60	0
010	Total Nitrogen (21%)	0307	21.34	0.1200	21.05	0.3075	0.1541	82	0.96	010.60	0
010	Total Nitrogen (21%)	0034	21.35	0.1400	21.05	0.3075	0.1541	82	0.99	010.60	0
010	Total Nitrogen (21%)	0040	21.35	0.3000	21.05	0.3075	0.1541	82	0.99	010.60	0
010	Total Nitrogen (21%)	0521	21.37	0.0000	21.05	0.3075	0.1541	82	1.04	010.60	0
010	Total Nitrogen (21%)	0324	21.45	0.3000	21.05	0.3075	0.1541	82	1.32	010.60	0
010	Total Nitrogen (21%)	0025	21.46	0.4800	21.05	0.3075	0.1541	82	1.35	010.60	0
010	Total Nitrogen (21%)	0543	21.48	0.7980	21.05	0.3075	0.1541	82	1.40	010.60	0
010	Total Nitrogen (21%)	0292	21.48	0.0400	21.05	0.3075	0.1541	82	1.41	010.60	0
010	Total Nitrogen (21%)	0007	21.50	0.4000	21.05	0.3075	0.1541	82	1.48	010.60	0
010	Total Nitrogen (21%)	0485	21.54	0.0710	21.05	0.3075	0.1541	82	1.62	010.60	0
010	Total Nitrogen (21%)	0506	21.55	0.3000	21.05	0.3075	0.1541	82	1.64	010.99	0
010	Total Nitrogen (21%)	0494	21.72	0.0300	21.05	0.3075	0.1541	82	2.18	010.60	0
010	Total Nitrogen (21%)	0405	21.85	0.1410	21.05	0.3075	0.1541	82	2.60	010.60	0
010	Total Nitrogen (21%)	0073	21.98	0.2100	21.05	0.3075	0.1541	82	3.02	010.60	0
010	Total Nitrogen (21%)	0309	19.35*	0.9500	21.05	0.3075	0.1541	82	-5.53	010.11	1
010	Total Nitrogen (21%)	0117	20.05*	1.500	21.05	0.3075	0.1541	82	-3.24	010.12	1
010	Total Nitrogen (21%)	0541	6.280*	0.0000	21.05	0.3075	0.1541	82	-48.02	010.60	2
020	Total Phosphorus as P2O5 (%)	0515	0.0133	0.0017	0.0579	0.0545	0.0269	9	-0.76	020.99	0
020	Total Phosphorus as P2O5 (%)	0524	0.0246	0.0008	0.0579	0.0545	0.0269	9	-0.56	020.50	0
020	Total Phosphorus as P2O5 (%)	0521	0.0288	0.0000	0.0579	0.0545	0.0269	9	-0.49	020.50	0
020	Total Phosphorus as P2O5 (%)	0307	0.0300	0.0200	0.0579	0.0545	0.0269	9	-0.47	020.50	0
020	Total Phosphorus as P2O5 (%)	0527	0.0400	0.0000	0.0579	0.0545	0.0269	9	-0.30	020.50	0
020	Total Phosphorus as P2O5 (%)	0389	0.0500	0.0000	0.0579	0.0545	0.0269	9	-0.13	020.50	0
020	Total Phosphorus as P2O5 (%)	0483	0.0550	0.0700	0.0579	0.0545	0.0269	9	-0.05	020.50	0
020	Total Phosphorus as P2O5 (%)	0096	0.1600	0.0600	0.0579	0.0545	0.0269	9	1.73	020.40	0
020	Total Phosphorus as P2O5 (%)	0541	0.8450	0.0900	0.0579	0.0545	0.0269	9	13.33	020.20	0
020	Total Phosphorus as P2O5 (%)	0255	0.0825	0.1650	0.0579	0.0545	0.0269	9		020.50	4
030	Citrate Insoluble Phosphorus as P2O5 (%)	0096	0.1050	0.0100				1		030.40	0
040	Indirect Available Phosphorus as P2O5 (5%)	0096	0.0400	0.0000				1		040.40	0
041	Direct Available Phosphorus as P2O5 (5%)	0137	0.0135	0.0050	0.0401	0.0403	0.0073	4	-0.56	041.50	0
041	Direct Available Phosphorus as P2O5 (5%)	0185	0.0200	0.0200	0.0401	0.0403	0.0073	4	-0.42	041.11	0
041	Direct Available Phosphorus as P2O5 (5%)	0354	0.0270	0.0040	0.0401	0.0403	0.0073	4	-0.28	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0325	0.1000	0.0000	0.0401	0.0403	0.0073	4	1.26	041.50	0
041	Direct Available Phosphorus as P2O5 (5%)	0043	0.0000	0.0000	0.0401	0.0403	0.0073	4		041.50	4
041	Direct Available Phosphorus as P2O5 (5%)	0043	0.0000	0.0000	0.0401	0.0403	0.0073	4		041.60	4
041	Direct Available Phosphorus as P2O5 (5%)	0494	0.2250	0.4500	0.0401	0.0403	0.0073	4		041.51	4
048	Water Soluble Phosphorus as P2O5 (%)	0096	0.0650	0.0300				1		048.40	0
050	Soluble Potassium as K2O (%)	0096	4.140	0.1600	5.096	0.1878	0.1131	91	-5.09	050.99	0
050	Soluble Potassium as K2O (%)	0541	4.395	0.2700	5.096	0.1878	0.1131	91	-3.73	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 (%)	0501	4.566	0.3440	5.096	0.1878	0.1131	91	-2.82	050.99	0
050	Soluble Potassium as K2O (%)	0309	4.605	0.0300	5.096	0.1878	0.1131	91	-2.61	050.30	0
050	Soluble Potassium as K2O (%)	0472	4.720	0.0800	5.096	0.1878	0.1131	91	-2.00	050.31	0
050	Soluble Potassium as K2O (%)	0200	4.760	0.3200	5.096	0.1878	0.1131	91	-1.79	050.60	0
050	Soluble Potassium as K2O (%)	0035	4.795	0.2100	5.096	0.1878	0.1131	91	-1.60	050.61	0
050	Soluble Potassium as K2O (%)	0117	4.809	0.3750	5.096	0.1878	0.1131	91	-1.53	050.52	0
050	Soluble Potassium as K2O (%)	0483	4.820	0.3400	5.096	0.1878	0.1131	91	-1.47	050.51	0
050	Soluble Potassium as K2O (%)	0482	4.860	0.2400	5.096	0.1878	0.1131	91	-1.26	050.99	0
050	Soluble Potassium as K2O (%)	0524	4.881	0.0617	5.096	0.1878	0.1131	91	-1.14	050.99	0
050	Soluble Potassium as K2O (%)	0518	4.885	0.3500	5.096	0.1878	0.1131	91	-1.12	050.99	0
050	Soluble Potassium as K2O (%)	0234	4.900	0.0400	5.096	0.1878	0.1131	91	-1.04	050.99	0
050	Soluble Potassium as K2O (%)	0521	4.910	0.0000	5.096	0.1878	0.1131	91	-0.99	050.99	0
050	Soluble Potassium as K2O (%)	0500	4.915	0.0300	5.096	0.1878	0.1131	91	-0.96	050.99	0
050	Soluble Potassium as K2O (%)	0397	4.921	0.0960	5.096	0.1878	0.1131	91	-0.93	050.50	0
050	Soluble Potassium as K2O (%)	0040	4.950	0.1000	5.096	0.1878	0.1131	91	-0.78	050.30	0
050	Soluble Potassium as K2O (%)	0506	4.950	0.1000	5.096	0.1878	0.1131	91	-0.78	050.99	0
050	Soluble Potassium as K2O (%)	0073	4.965	0.3300	5.096	0.1878	0.1131	91	-0.70	050.00	0
050	Soluble Potassium as K2O (%)	0433	4.965	0.1300	5.096	0.1878	0.1131	91	-0.70	050.99	0
050	Soluble Potassium as K2O (%)	0324	4.970	0.2400	5.096	0.1878	0.1131	91	-0.67	050.50	0
050	Soluble Potassium as K2O (%)	0041	4.980	0.1400	5.096	0.1878	0.1131	91	-0.62	050.60	0
050	Soluble Potassium as K2O (%)	0394	4.986	0.0660	5.096	0.1878	0.1131	91	-0.58	050.99	0
050	Soluble Potassium as K2O (%)	0169	4.995	0.0700	5.096	0.1878	0.1131	91	-0.54	050.60	0
050	Soluble Potassium as K2O (%)	0494	5.000	0.2400	5.096	0.1878	0.1131	91	-0.51	050.52	0
050	Soluble Potassium as K2O (%)	0025	5.004	0.2340	5.096	0.1878	0.1131	91	-0.49	050.52	0
050	Soluble Potassium as K2O (%)	0377	5.010	0.0800	5.096	0.1878	0.1131	91	-0.46	050.52	0
050	Soluble Potassium as K2O (%)	0055	5.015	0.0100	5.096	0.1878	0.1131	91	-0.43	050.50	0
050	Soluble Potassium as K2O (%)	0292	5.015	0.0500	5.096	0.1878	0.1131	91	-0.43	050.50	0
050	Soluble Potassium as K2O (%)	0029	5.015	0.0500	5.096	0.1878	0.1131	91	-0.43	050.62	0
050	Soluble Potassium as K2O (%)	0034	5.022	0.0317	5.096	0.1878	0.1131	91	-0.40	050.62	0
050	Soluble Potassium as K2O (%)	0105	5.025	0.0700	5.096	0.1878	0.1131	91	-0.38	050.60	0
050	Soluble Potassium as K2O (%)	0105	5.030	0.0200	5.096	0.1878	0.1131	91	-0.35	050.62	0
050	Soluble Potassium as K2O (%)	0533	5.030	0.0400	5.096	0.1878	0.1131	91	-0.35	050.99	0
050	Soluble Potassium as K2O (%)	0220	5.030	0.1800	5.096	0.1878	0.1131	91	-0.35	050.00	0
050	Soluble Potassium as K2O (%)	0356	5.035	0.0500	5.096	0.1878	0.1131	91	-0.32	050.30	0
050	Soluble Potassium as K2O (%)	0027	5.035	0.2500	5.096	0.1878	0.1131	91	-0.32	050.99	0
050	Soluble Potassium as K2O (%)	0513	5.040	0.0600	5.096	0.1878	0.1131	91	-0.30	050.62	0
050	Soluble Potassium as K2O (%)	0007	5.050	0.1000	5.096	0.1878	0.1131	91	-0.24	050.51	0
050	Soluble Potassium as K2O (%)	0535	5.050	0.1000	5.096	0.1878	0.1131	91	-0.24	050.61	0
050	Soluble Potassium as K2O (%)	0535	5.050	0.1000	5.096	0.1878	0.1131	91	-0.24	050.99	0
050	Soluble Potassium as K2O (%)	0177	5.056	0.0747	5.096	0.1878	0.1131	91	-0.21	050.99	0
050	Soluble Potassium as K2O (%)	0157	5.065	0.1500	5.096	0.1878	0.1131	91	-0.16	050.30	0
050	Soluble Potassium as K2O (%)	0536	5.075	0.0500	5.096	0.1878	0.1131	91	-0.11	050.99	0
050	Soluble Potassium as K2O (%)	0540	5.075	0.0500	5.096	0.1878	0.1131	91	-0.11	050.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
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050	Soluble Potassium as K2O (%)	0532	5.085	0.0300	5.096	0.1878	0.1131	91	-0.06	050.99	0
050	Soluble Potassium as K2O (%)	0406	5.105	0.4900	5.096	0.1878	0.1131	91	0.05	050.50	0
050	Soluble Potassium as K2O (%)	0486	5.110	0.0800	5.096	0.1878	0.1131	91	0.08	050.52	0
050	Soluble Potassium as K2O (%)	0136	5.115	0.0100	5.096	0.1878	0.1131	91	0.10	050.30	0
050	Soluble Potassium as K2O (%)	0416	5.116	0.1880	5.096	0.1878	0.1131	91	0.11	050.00	0
050	Soluble Potassium as K2O (%)	0055	5.130	0.1400	5.096	0.1878	0.1131	91	0.18	050.00	0
050	Soluble Potassium as K2O (%)	0043	5.130	0.0800	5.096	0.1878	0.1131	91	0.18	050.51	0
050	Soluble Potassium as K2O (%)	0354	5.134	0.0280	5.096	0.1878	0.1131	91	0.20	050.52	0
050	Soluble Potassium as K2O (%)	0023	5.145	0.0500	5.096	0.1878	0.1131	91	0.26	050.52	0
050	Soluble Potassium as K2O (%)	0529	5.145	0.1100	5.096	0.1878	0.1131	91	0.26	050.60	0
050	Soluble Potassium as K2O (%)	0537	5.148	0.2954	5.096	0.1878	0.1131	91	0.28	050.99	0
050	Soluble Potassium as K2O (%)	0493	5.150	0.1000	5.096	0.1878	0.1131	91	0.29	050.99	0
050	Soluble Potassium as K2O (%)	0307	5.160	0.2600	5.096	0.1878	0.1131	91	0.34	050.99	0
050	Soluble Potassium as K2O (%)	0539	5.170	0.0400	5.096	0.1878	0.1131	91	0.39	050.99	0
050	Soluble Potassium as K2O (%)	0070	5.175	0.0100	5.096	0.1878	0.1131	91	0.42	050.51	0
050	Soluble Potassium as K2O (%)	0231	5.175	0.0500	5.096	0.1878	0.1131	91	0.42	050.00	0
050	Soluble Potassium as K2O (%)	0522	5.175	0.0300	5.096	0.1878	0.1131	91	0.42	050.00	0
050	Soluble Potassium as K2O (%)	0538	5.180	0.0800	5.096	0.1878	0.1131	91	0.45	050.99	0
050	Soluble Potassium as K2O (%)	0527	5.190	0.1000	5.096	0.1878	0.1131	91	0.50	050.99	0
050	Soluble Potassium as K2O (%)	0389	5.195	0.0500	5.096	0.1878	0.1131	91	0.53	050.99	0
050	Soluble Potassium as K2O (%)	0526	5.195	0.0100	5.096	0.1878	0.1131	91	0.53	050.99	0
050	Soluble Potassium as K2O (%)	0368	5.197	0.0843	5.096	0.1878	0.1131	91	0.54	050.99	0
050	Soluble Potassium as K2O (%)	0114	5.200	0.0000	5.096	0.1878	0.1131	91	0.55	050.00	0
050	Soluble Potassium as K2O (%)	0451	5.200	0.0200	5.096	0.1878	0.1131	91	0.55	050.99	0
050	Soluble Potassium as K2O (%)	0086	5.201	0.3485	5.096	0.1878	0.1131	91	0.56	050.50	0
050	Soluble Potassium as K2O (%)	0405	5.220	0.0800	5.096	0.1878	0.1131	91	0.66	050.00	0
050	Soluble Potassium as K2O (%)	0360	5.220	0.0200	5.096	0.1878	0.1131	91	0.66	050.52	0
050	Soluble Potassium as K2O (%)	0423	5.225	0.0500	5.096	0.1878	0.1131	91	0.69	050.52	0
050	Soluble Potassium as K2O (%)	0452	5.235	0.0500	5.096	0.1878	0.1131	91	0.74	050.51	0
050	Soluble Potassium as K2O (%)	0291	5.235	0.0100	5.096	0.1878	0.1131	91	0.74	050.51	0
050	Soluble Potassium as K2O (%)	0043	5.245	0.1900	5.096	0.1878	0.1131	91	0.79	050.99	0
050	Soluble Potassium as K2O (%)	0476	5.252	0.0718	5.096	0.1878	0.1131	91	0.83	050.99	0
050	Soluble Potassium as K2O (%)	0157	5.295	0.1300	5.096	0.1878	0.1131	91	1.06	050.50	0
050	Soluble Potassium as K2O (%)	0402	5.300	0.0200	5.096	0.1878	0.1131	91	1.09	050.99	0
050	Soluble Potassium as K2O (%)	0137	5.349	0.0600	5.096	0.1878	0.1131	91	1.35	050.52	0
050	Soluble Potassium as K2O (%)	0523	5.350	0.3000	5.096	0.1878	0.1131	91	1.35	050.99	0
050	Soluble Potassium as K2O (%)	0185	5.385	0.1100	5.096	0.1878	0.1131	91	1.54	050.32	0
050	Soluble Potassium as K2O (%)	0444	5.425	0.0500	5.096	0.1878	0.1131	91	1.75	050.99	0
050	Soluble Potassium as K2O (%)	0510	5.480	0.0186	5.096	0.1878	0.1131	91	2.04	050.60	0
050	Soluble Potassium as K2O (%)	0444	5.705	0.1100	5.096	0.1878	0.1131	91	3.24	050.50	0
050	Soluble Potassium as K2O (%)	0042	5.730	0.0400	5.096	0.1878	0.1131	91	3.38	050.99	0
050	Soluble Potassium as K2O (%)	0543	5.790	0.0910	5.096	0.1878	0.1131	91	3.69	050.52	0
050	Soluble Potassium as K2O (%)	0102	5.800	0.0000	5.096	0.1878	0.1131	91	3.75	050.00	0



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050	Soluble Potassium as K2O (%)	0230	5.835	0.0100	5.096	0.1878	0.1131	91	3.94	050.50	0
050	Soluble Potassium as K2O (%)	0131	6.150	0.0200	5.096	0.1878	0.1131	91	5.61	050.61	0
050	Soluble Potassium as K2O (%)	0494	6.820	0.0600	5.096	0.1878	0.1131	91	9.18	050.00	0
050	Soluble Potassium as K2O (%)	0325	4.750	0.7000	5.096	0.1878	0.1131	91	-1.84	050.99	1
050	Soluble Potassium as K2O (%)	0255	5.028	0.6900	5.096	0.1878	0.1131	91	-0.36	050.99	1
050	Soluble Potassium as K2O (%)	0371	39.70	0.0000	5.096	0.1878	0.1131	91	184.22	050.99	2
060	Water (Free) (%)	0513	1.300	0.0200	1.511	0.1895	0.0105	7	-1.01	060.99	0
060	Water (Free) (%)	0007	1.350	0.0200	1.511	0.1895	0.0105	7	-0.77	060.00	0
060	Water (Free) (%)	0518	1.465	0.0100	1.511	0.1895	0.0105	7	-0.22	060.99	0
060	Water (Free) (%)	0416	1.490	0.0005	1.511	0.1895	0.0105	7	-0.10	060.00	0
060	Water (Free) (%)	0055	1.560	0.0200	1.511	0.1895	0.0105	7	0.23	060.99	0
060	Water (Free) (%)	0510	1.617	0.0033	1.511	0.1895	0.0105	7	0.51	060.99	0
060	Water (Free) (%)	0096	1.990	0.0000	1.511	0.1895	0.0105	7	2.29	060.00	0
060	Water (Free) (%)	0055	2.650	0.1000	1.511	0.1895	0.0105	7	5.43	060.30	1
101	Acid Soluble Calcium (%)	0035	6.055	0.0900	6.730	0.4868	0.1832	17	-1.39	101.30	0
101	Acid Soluble Calcium (%)	0389	6.185	0.0900	6.730	0.4868	0.1832	17	-1.12	101.99	0
101	Acid Soluble Calcium (%)	0009	6.250	0.7000	6.730	0.4868	0.1832	17	-0.99	101.33	0
101	Acid Soluble Calcium (%)	0086	6.337	0.6950	6.730	0.4868	0.1832	17	-0.81	101.33	0
101	Acid Soluble Calcium (%)	0041	6.480	0.1200	6.730	0.4868	0.1832	17	-0.51	101.30	0
101	Acid Soluble Calcium (%)	0521	6.481	0.0000	6.730	0.4868	0.1832	17	-0.51	101.32	0
101	Acid Soluble Calcium (%)	0494	6.532	0.3973	6.730	0.4868	0.1832	17	-0.41	101.33	0
101	Acid Soluble Calcium (%)	0472	6.575	0.0300	6.730	0.4868	0.1832	17	-0.32	101.30	0
101	Acid Soluble Calcium (%)	0482	6.710	0.2800	6.730	0.4868	0.1832	17	-0.04	101.30	0
101	Acid Soluble Calcium (%)	0117	6.759	0.0550	6.730	0.4868	0.1832	17	0.06	101.33	0
101	Acid Soluble Calcium (%)	0354	6.816	0.0300	6.730	0.4868	0.1832	17	0.18	101.30	0
101	Acid Soluble Calcium (%)	0105	6.934	0.2650	6.730	0.4868	0.1832	17	0.42	101.00	0
101	Acid Soluble Calcium (%)	0034	6.965	0.0100	6.730	0.4868	0.1832	17	0.48	101.33	0
101	Acid Soluble Calcium (%)	0423	7.120	0.0600	6.730	0.4868	0.1832	17	0.80	101.32	0
101	Acid Soluble Calcium (%)	0527	7.365	0.0260	6.730	0.4868	0.1832	17	1.30	101.33	0
101	Acid Soluble Calcium (%)	0483	7.395	0.0300	6.730	0.4868	0.1832	17	1.37	101.30	0
101	Acid Soluble Calcium (%)	0096	7.451	0.2360	6.730	0.4868	0.1832	17	1.48	101.30	0
121	Acid Soluble Magnesium (%)	0009	2.400	0.2000	2.613	0.1894	0.0559	21	-1.12	121.33	0
121	Acid Soluble Magnesium (%)	0524	2.402	0.0005	2.613	0.1894	0.0559	21	-1.11	121.99	0
121	Acid Soluble Magnesium (%)	0035	2.410	0.0400	2.613	0.1894	0.0559	21	-1.07	121.30	0
121	Acid Soluble Magnesium (%)	0515	2.455	0.0006	2.613	0.1894	0.0559	21	-0.83	121.33	0
121	Acid Soluble Magnesium (%)	0086	2.463	0.0444	2.613	0.1894	0.0559	21	-0.79	121.33	0
121	Acid Soluble Magnesium (%)	0041	2.475	0.0700	2.613	0.1894	0.0559	21	-0.73	121.30	0
121	Acid Soluble Magnesium (%)	0025	2.523	0.0290	2.613	0.1894	0.0559	21	-0.48	121.33	0
121	Acid Soluble Magnesium (%)	0515	2.535	0.0916	2.613	0.1894	0.0559	21	-0.41	121.99	0
121	Acid Soluble Magnesium (%)	0034	2.558	0.0090	2.613	0.1894	0.0559	21	-0.29	121.33	0
121	Acid Soluble Magnesium (%)	0105	2.576	0.0900	2.613	0.1894	0.0559	21	-0.19	121.00	0
121	Acid Soluble Magnesium (%)	0117	2.583	0.0160	2.613	0.1894	0.0559	21	-0.16	121.33	0
121	Acid Soluble Magnesium (%)	0482	2.605	0.1300	2.613	0.1894	0.0559	21	-0.04	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 (%)	0096	2.620	0.0800	2.613	0.1894	0.0559	21	0.04	121.30	0
121	Acid Soluble Magnesium (%)	0423	2.625	0.0100	2.613	0.1894	0.0559	21	0.06	121.32	0
121	Acid Soluble Magnesium (%)	0494	2.630	0.1594	2.613	0.1894	0.0559	21	0.09	121.33	0
121	Acid Soluble Magnesium (%)	0354	2.646	0.0530	2.613	0.1894	0.0559	21	0.17	121.30	0
121	Acid Soluble Magnesium (%)	0483	2.845	0.0700	2.613	0.1894	0.0559	21	1.23	121.30	0
121	Acid Soluble Magnesium (%)	0521	2.853	0.0000	2.613	0.1894	0.0559	21	1.27	121.32	0
121	Acid Soluble Magnesium (%)	0527	2.871	0.0080	2.613	0.1894	0.0559	21	1.36	121.33	0
121	Acid Soluble Magnesium (%)	0472	2.900	0.0000	2.613	0.1894	0.0559	21	1.52	121.30	0
121	Acid Soluble Magnesium (%)	0307	3.007	0.0720	2.613	0.1894	0.0559	21	2.08	121.99	0
143	Elemental Sulfur (%)	0472	5.185	0.0500	5.392	0.1831	0.0593	3	-1.13	143.99	0
143	Elemental Sulfur (%)	0291	5.460	0.0200	5.392	0.1831	0.0593	3	0.37	143.99	0
143	Elemental Sulfur (%)	0255	5.532	0.1080	5.392	0.1831	0.0593	3	0.76	143.99	0
145	Sulfate Sulfur, HCl soluble (%)	0200	5.130	0.0600	5.412	0.2180	0.1183	11	-1.21	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0444	5.265	0.2100	5.412	0.2180	0.1183	11	-0.63	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0522	5.270	0.0200	5.412	0.2180	0.1183	11	-0.61	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0405	5.284	0.0157	5.412	0.2180	0.1183	11	-0.55	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0220	5.325	0.0100	5.412	0.2180	0.1183	11	-0.37	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0444	5.365	0.4100	5.412	0.2180	0.1183	11	-0.20	145.99	0
145	Sulfate Sulfur, HCl soluble (%)	0485	5.397	0.1354	5.412	0.2180	0.1183	11	-0.07	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0397	5.485	0.0700	5.412	0.2180	0.1183	11	0.31	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0043	5.575	0.0500	5.412	0.2180	0.1183	11	0.70	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0027	5.700	0.1200	5.412	0.2180	0.1183	11	1.23	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0518	8.500	0.2000	5.412	0.2180	0.1183	11	13.25	145.99	0
146	Total Sulfur in Liquid (%)	0131	5.505	0.0500				1		146.99	0
148	Total Sulfur (8.6%)	0136	4.565*	0.1900	5.343	0.2401	0.1174	44	-3.24	148.00	0
148	Total Sulfur (8.6%)	0360	4.645*	0.0100	5.343	0.2401	0.1174	44	-2.91	148.00	0
148	Total Sulfur (8.6%)	0523	5.000	0.4000	5.343	0.2401	0.1174	44	-1.43	148.99	0
148	Total Sulfur (8.6%)	0096	5.051	0.0130	5.343	0.2401	0.1174	44	-1.22	148.99	0
148	Total Sulfur (8.6%)	0394	5.090	0.0200	5.343	0.2401	0.1174	44	-1.05	148.07	0
148	Total Sulfur (8.6%)	0506	5.090	0.1400	5.343	0.2401	0.1174	44	-1.05	148.99	0
148	Total Sulfur (8.6%)	0501	5.093	0.0060	5.343	0.2401	0.1174	44	-1.04	148.99	0
148	Total Sulfur (8.6%)	0137	5.103	0.1640	5.343	0.2401	0.1174	44	-1.00	148.99	0
148	Total Sulfur (8.6%)	0444	5.150	0.4200	5.343	0.2401	0.1174	44	-0.80	148.07	0
148	Total Sulfur (8.6%)	0025	5.152	0.0200	5.343	0.2401	0.1174	44	-0.79	148.00	0
148	Total Sulfur (8.6%)	0230	5.180	0.1800	5.343	0.2401	0.1174	44	-0.68	148.01	0
148	Total Sulfur (8.6%)	0231	5.190	0.0400	5.343	0.2401	0.1174	44	-0.64	148.00	0
148	Total Sulfur (8.6%)	0324	5.190	0.5200	5.343	0.2401	0.1174	44	-0.64	148.01	0
148	Total Sulfur (8.6%)	0037	5.223	0.0310	5.343	0.2401	0.1174	44	-0.50	148.07	0
148	Total Sulfur (8.6%)	0117	5.245	0.0410	5.343	0.2401	0.1174	44	-0.41	148.07	0
148	Total Sulfur (8.6%)	0157	5.250	0.1800	5.343	0.2401	0.1174	44	-0.39	148.00	0
148	Total Sulfur (8.6%)	0105	5.250	0.0200	5.343	0.2401	0.1174	44	-0.39	148.01	0
148	Total Sulfur (8.6%)	0444	5.250	0.3000	5.343	0.2401	0.1174	44	-0.39	148.01	0
148	Total Sulfur (8.6%)	0040	5.300	0.0000	5.343	0.2401	0.1174	44	-0.18	148.01	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
148	Total Sulfur (8.6%)	0029	5.310	0.1000	5.343	0.2401	0.1174	44	-0.14	148.01	0
148	Total Sulfur (8.6%)	0500	5.340	0.0800	5.343	0.2401	0.1174	44	-0.01	148.01	0
148	Total Sulfur (8.6%)	0368	5.352	0.3977	5.343	0.2401	0.1174	44	0.04	148.99	0
148	Total Sulfur (8.6%)	0494	5.357	0.0146	5.343	0.2401	0.1174	44	0.06	148.07	0
148	Total Sulfur (8.6%)	0023	5.365	0.0650	5.343	0.2401	0.1174	44	0.09	148.07	0
148	Total Sulfur (8.6%)	0029	5.378	0.0390	5.343	0.2401	0.1174	44	0.14	148.00	0
148	Total Sulfur (8.6%)	0055	5.385	0.0100	5.343	0.2401	0.1174	44	0.18	148.01	0
148	Total Sulfur (8.6%)	0476	5.399	0.0091	5.343	0.2401	0.1174	44	0.23	148.99	0
148	Total Sulfur (8.6%)	0451	5.405	0.0330	5.343	0.2401	0.1174	44	0.26	148.00	0
148	Total Sulfur (8.6%)	0354	5.418	0.1740	5.343	0.2401	0.1174	44	0.31	148.99	0
148	Total Sulfur (8.6%)	0486	5.425	0.0900	5.343	0.2401	0.1174	44	0.34	148.07	0
148	Total Sulfur (8.6%)	0483	5.430	0.4200	5.343	0.2401	0.1174	44	0.36	148.07	0
148	Total Sulfur (8.6%)	0102	5.449	0.1143	5.343	0.2401	0.1174	44	0.44	148.01	0
148	Total Sulfur (8.6%)	0040	5.450	0.0800	5.343	0.2401	0.1174	44	0.45	148.99	0
148	Total Sulfur (8.6%)	0377	5.460	0.1600	5.343	0.2401	0.1174	44	0.49	148.99	0
148	Total Sulfur (8.6%)	0177	5.468	0.0641	5.343	0.2401	0.1174	44	0.52	148.07	0
148	Total Sulfur (8.6%)	0157	5.510	0.0800	5.343	0.2401	0.1174	44	0.70	148.01	0
148	Total Sulfur (8.6%)	0102	5.569	0.0849	5.343	0.2401	0.1174	44	0.94	148.07	0
148	Total Sulfur (8.6%)	0482	5.660	0.0200	5.343	0.2401	0.1174	44	1.32	148.99	0
148	Total Sulfur (8.6%)	0220	5.670	0.0200	5.343	0.2401	0.1174	44	1.36	148.99	0
148	Total Sulfur (8.6%)	0527	5.959	0.0650	5.343	0.2401	0.1174	44	2.56	148.07	0
148	Total Sulfur (8.6%)	0515	6.723	0.0480	5.343	0.2401	0.1174	44	5.75	148.07	0
148	Total Sulfur (8.6%)	0307	7.957	0.1830	5.343	0.2401	0.1174	44	10.88	148.99	0
148	Total Sulfur (8.6%)	0073	8.100	0.0200	5.343	0.2401	0.1174	44	11.48	148.01	0
148	Total Sulfur (8.6%)	0534	8.590	0.1000	5.343	0.2401	0.1174	44	13.52	148.01	0
148	Total Sulfur (8.6%)	0406	5.700	1.420	5.343	0.2401	0.1174	44	1.49	148.07	1
148	Total Sulfur (8.6%)	0485	0.00000*	0.0000	5.343	0.2401	0.1174	44		148.01	4
149	Sulfur - HNO3 soluble (%)	0524	5.064	0.1210	5.314	0.2530	0.0670	3	-0.99	149.04	0
149	Sulfur - HNO3 soluble (%)	0423	5.310	0.0800	5.314	0.2530	0.0670	3	-0.02	149.04	0
149	Sulfur - HNO3 soluble (%)	0521	5.569	0.0000	5.314	0.2530	0.0670	3	1.01	149.04	0
151	Acid Soluble Arsenic (ppm)	0541	0.4650	0.7900	1.347	0.6352	0.3228	13	-1.39	151.30	0
151	Acid Soluble Arsenic (ppm)	0255	0.7951	0.1352	1.347	0.6352	0.3228	13	-0.87	151.30	0
151	Acid Soluble Arsenic (ppm)	0476	0.9370	0.0420	1.347	0.6352	0.3228	13	-0.64	151.99	0
151	Acid Soluble Arsenic (ppm)	0136	1.000	0.0000	1.347	0.6352	0.3228	13	-0.55	151.00	0
151	Acid Soluble Arsenic (ppm)	0394	1.045	0.1075	1.347	0.6352	0.3228	13	-0.47	151.30	0
151	Acid Soluble Arsenic (ppm)	0527	1.080	0.0630	1.347	0.6352	0.3228	13	-0.42	151.33	0
151	Acid Soluble Arsenic (ppm)	0009	1.200	0.2000	1.347	0.6352	0.3228	13	-0.23	151.99	0
151	Acid Soluble Arsenic (ppm)	0529	1.305	0.0100	1.347	0.6352	0.3228	13	-0.07	151.30	0
151	Acid Soluble Arsenic (ppm)	0515	1.609	0.9230	1.347	0.6352	0.3228	13	0.41	151.34	0
151	Acid Soluble Arsenic (ppm)	0494	1.627	0.2871	1.347	0.6352	0.3228	13	0.44	151.33	0
151	Acid Soluble Arsenic (ppm)	0515	1.844	0.0380	1.347	0.6352	0.3228	13	0.78	151.33	0
151	Acid Soluble Arsenic (ppm)	0220	3.850	0.5000	1.347	0.6352	0.3228	13	3.94	151.99	0
151	Acid Soluble Arsenic (ppm)	0368	6.450	1.100	1.347	0.6352	0.3228	13	8.03	151.30	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
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151	Acid Soluble Arsenic (ppm)	0105	19.97	13.71	1.347	0.6352	0.3228	13	29.31	151.33	1
151	Acid Soluble Arsenic (ppm)	0009	0.0000	0.0000	1.347	0.6352	0.3228	13		151.33	4
165	Acid Soluble Boron (%)	0483	0.0013	0.0020	0.0039	0.0044	0.0010	7	-0.53	165.99	0
165	Acid Soluble Boron (%)	0009	0.0016	0.0001	0.0039	0.0044	0.0010	7	-0.48	165.99	0
165	Acid Soluble Boron (%)	0423	0.0016	0.0001	0.0039	0.0044	0.0010	7	-0.48	165.99	0
165	Acid Soluble Boron (%)	0524	0.0018	0.0000	0.0039	0.0044	0.0010	7	-0.43	165.99	0
165	Acid Soluble Boron (%)	0521	0.0021	0.0000	0.0039	0.0044	0.0010	7	-0.37	165.30	0
165	Acid Soluble Boron (%)	0527	0.0085	0.0030	0.0039	0.0044	0.0010	7	0.95	165.99	0
165	Acid Soluble Boron (%)	0354	0.0220	0.0020	0.0039	0.0044	0.0010	7	3.73	165.30	0
165	Acid Soluble Boron (%)	0086	82.17	6.356	0.0039	0.0044	0.0010	7	16919.25	165.30	2
165	Acid Soluble Boron (%)	0515	0.0000	0.0000	0.0039	0.0044	0.0010	7		165.99	4
181	Acid Soluble Cadmium (ppm)	0255	0.1422	0.0296	0.2405	0.0904	0.0276	13	-1.09	181.30	0
181	Acid Soluble Cadmium (ppm)	0523	0.1450	0.0100	0.2405	0.0904	0.0276	13	-1.06	181.30	0
181	Acid Soluble Cadmium (ppm)	0476	0.1530	0.0140	0.2405	0.0904	0.0276	13	-0.97	181.99	0
181	Acid Soluble Cadmium (ppm)	0506	0.1600	0.0400	0.2405	0.0904	0.0276	13	-0.89	181.99	0
181	Acid Soluble Cadmium (ppm)	0136	0.2000	0.0000	0.2405	0.0904	0.0276	13	-0.45	181.00	0
181	Acid Soluble Cadmium (ppm)	0009	0.2100	0.0200	0.2405	0.0904	0.0276	13	-0.34	181.99	0
181	Acid Soluble Cadmium (ppm)	0220	0.2500	0.1000	0.2405	0.0904	0.0276	13	0.11	181.99	0
181	Acid Soluble Cadmium (ppm)	0527	0.2565	0.0110	0.2405	0.0904	0.0276	13	0.18	181.33	0
181	Acid Soluble Cadmium (ppm)	0394	0.2785	0.0550	0.2405	0.0904	0.0276	13	0.42	181.30	0
181	Acid Soluble Cadmium (ppm)	0524	0.2957	0.0088	0.2405	0.0904	0.0276	13	0.61	181.30	0
181	Acid Soluble Cadmium (ppm)	0529	0.3000	0.0000	0.2405	0.0904	0.0276	13	0.66	181.30	0
181	Acid Soluble Cadmium (ppm)	0494	0.3591	0.0336	0.2405	0.0904	0.0276	13	1.31	181.33	0
181	Acid Soluble Cadmium (ppm)	0035	0.4915	0.0370	0.2405	0.0904	0.0276	13	2.78	181.30	0
181	Acid Soluble Cadmium (ppm)	0541	1.670	0.8200	0.2405	0.0904	0.0276	13	15.81	181.30	1
181	Acid Soluble Cadmium (ppm)	0368	0.0000	0.0000	0.2405	0.0904	0.0276	13		181.30	4
181	Acid Soluble Cadmium (ppm)	0009	0.0000	0.0000	0.2405	0.0904	0.0276	13		181.33	4
181	Acid Soluble Cadmium (ppm)	0515	0.0000	0.0000	0.2405	0.0904	0.0276	13		181.33	4
181	Acid Soluble Cadmium (ppm)	0515	0.0000	0.0000	0.2405	0.0904	0.0276	13		181.34	4
190	Water Soluble Chlorine (%)	0105	0.0550	0.0100				1		190.00	0
191	Acid Soluble Chromium (ppm)	0506	51.35	2.100	101.7	15.49	2.910	22	-3.25	191.99	0
191	Acid Soluble Chromium (ppm)	0444	70.27	1.440	101.7	15.49	2.910	22	-2.03	191.30	0
191	Acid Soluble Chromium (ppm)	0529	72.80	0.3200	101.7	15.49	2.910	22	-1.87	191.30	0
191	Acid Soluble Chromium (ppm)	0035	75.40	2.600	101.7	15.49	2.910	22	-1.70	191.30	0
191	Acid Soluble Chromium (ppm)	0482	83.10	8.600	101.7	15.49	2.910	22	-1.20	191.30	0
191	Acid Soluble Chromium (ppm)	0394	92.40	0.0000	101.7	15.49	2.910	22	-0.60	191.30	0
191	Acid Soluble Chromium (ppm)	0541	100.0	10.00	101.7	15.49	2.910	22	-0.11	191.30	0
191	Acid Soluble Chromium (ppm)	0009	100.0	0.0000	101.7	15.49	2.910	22	-0.11	191.33	0
191	Acid Soluble Chromium (ppm)	0515	106.6	0.6340	101.7	15.49	2.910	22	0.32	191.34	0
191	Acid Soluble Chromium (ppm)	0494	107.0	4.445	101.7	15.49	2.910	22	0.34	191.33	0
191	Acid Soluble Chromium (ppm)	0027	107.0	0.8350	101.7	15.49	2.910	22	0.34	191.30	0
191	Acid Soluble Chromium (ppm)	0368	107.0	8.000	101.7	15.49	2.910	22	0.34	191.30	0
191	Acid Soluble Chromium (ppm)	0220	107.5	1.000	101.7	15.49	2.910	22	0.37	191.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
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191	Acid Soluble Chromium (ppm)	0230	108.5	1.000	101.7	15.49	2.910	22	0.44	191.34	0
191	Acid Soluble Chromium (ppm)	0515	108.9	2.892	101.7	15.49	2.910	22	0.46	191.33	0
191	Acid Soluble Chromium (ppm)	0086	109.9	2.480	101.7	15.49	2.910	22	0.53	191.33	0
191	Acid Soluble Chromium (ppm)	0096	110.7	2.100	101.7	15.49	2.910	22	0.58	191.30	0
191	Acid Soluble Chromium (ppm)	0117	111.5	2.700	101.7	15.49	2.910	22	0.63	191.33	0
191	Acid Soluble Chromium (ppm)	0527	113.4	0.8610	101.7	15.49	2.910	22	0.75	191.33	0
191	Acid Soluble Chromium (ppm)	0037	114.8	5.511	101.7	15.49	2.910	22	0.85	191.33	0
191	Acid Soluble Chromium (ppm)	0105	115.9	6.500	101.7	15.49	2.910	22	0.91	191.33	0
191	Acid Soluble Chromium (ppm)	0009	120.0	0.0000	101.7	15.49	2.910	22	1.18	191.99	0
191	Acid Soluble Chromium (ppm)	0476	61.39	16.88	101.7	15.49	2.910	22	-2.60	191.99	1
202	Acid Soluble Cobalt (ppm)	0524	4.203	0.0265	12.81	3.344	0.9649	22	-2.57	202.30	0
202	Acid Soluble Cobalt (ppm)	0096	5.655	1.610	12.81	3.344	0.9649	22	-2.14	202.30	0
202	Acid Soluble Cobalt (ppm)	0506	9.075	0.8900	12.81	3.344	0.9649	22	-1.12	202.99	0
202	Acid Soluble Cobalt (ppm)	0476	9.885	2.430	12.81	3.344	0.9649	22	-0.87	202.99	0
202	Acid Soluble Cobalt (ppm)	0255	10.30	1.901	12.81	3.344	0.9649	22	-0.75	202.99	0
202	Acid Soluble Cobalt (ppm)	0529	10.48	0.7700	12.81	3.344	0.9649	22	-0.70	202.30	0
202	Acid Soluble Cobalt (ppm)	0230	10.80	0.0000	12.81	3.344	0.9649	22	-0.60	202.34	0
202	Acid Soluble Cobalt (ppm)	0368	11.20	0.6000	12.81	3.344	0.9649	22	-0.48	202.30	0
202	Acid Soluble Cobalt (ppm)	0035	11.30	2.200	12.81	3.344	0.9649	22	-0.45	202.30	0
202	Acid Soluble Cobalt (ppm)	0220	12.00	0.0000	12.81	3.344	0.9649	22	-0.24	202.99	0
202	Acid Soluble Cobalt (ppm)	0423	12.34	0.0700	12.81	3.344	0.9649	22	-0.14	202.32	0
202	Acid Soluble Cobalt (ppm)	0482	13.00	1.000	12.81	3.344	0.9649	22	0.06	202.30	0
202	Acid Soluble Cobalt (ppm)	0105	13.25	3.290	12.81	3.344	0.9649	22	0.13	202.33	0
202	Acid Soluble Cobalt (ppm)	0037	14.47	0.9600	12.81	3.344	0.9649	22	0.50	202.33	0
202	Acid Soluble Cobalt (ppm)	0009	15.00	0.0000	12.81	3.344	0.9649	22	0.66	202.33	0
202	Acid Soluble Cobalt (ppm)	0515	15.16	1.483	12.81	3.344	0.9649	22	0.70	202.33	0
202	Acid Soluble Cobalt (ppm)	0494	15.83	0.7915	12.81	3.344	0.9649	22	0.90	202.33	0
202	Acid Soluble Cobalt (ppm)	0515	15.93	0.1370	12.81	3.344	0.9649	22	0.93	202.34	0
202	Acid Soluble Cobalt (ppm)	0086	16.26	1.879	12.81	3.344	0.9649	22	1.03	202.33	0
202	Acid Soluble Cobalt (ppm)	0117	16.39	0.6800	12.81	3.344	0.9649	22	1.07	202.33	0
202	Acid Soluble Cobalt (ppm)	0527	16.52	0.5090	12.81	3.344	0.9649	22	1.11	202.33	0
202	Acid Soluble Cobalt (ppm)	0009	17.00	0.0000	12.81	3.344	0.9649	22	1.25	202.99	0
221	Acid Soluble Copper (%)	0476	0.0054	0.0001	0.0084	0.0011	0.0963	34	-2.81	221.99	0
221	Acid Soluble Copper (%)	0524	0.0059	0.0001	0.0084	0.0011	0.0963	34	-2.36	221.99	0
221	Acid Soluble Copper (%)	0009	0.0069	0.0008	0.0084	0.0011	0.0963	34	-1.40	221.33	0
221	Acid Soluble Copper (%)	0105	0.0070	0.0000	0.0084	0.0011	0.0963	34	-1.31	221.00	0
221	Acid Soluble Copper (%)	0433	0.0075	0.0010	0.0084	0.0011	0.0963	34	-0.86	221.30	0
221	Acid Soluble Copper (%)	0035	0.0076	0.0001	0.0084	0.0011	0.0963	34	-0.81	221.30	0
221	Acid Soluble Copper (%)	0521	0.0077	0.0000	0.0084	0.0011	0.0963	34	-0.68	221.32	0
221	Acid Soluble Copper (%)	0009	0.0079	0.0001	0.0084	0.0011	0.0963	34	-0.54	221.99	0
221	Acid Soluble Copper (%)	0041	0.0080	0.0000	0.0084	0.0011	0.0963	34	-0.41	221.30	0
221	Acid Soluble Copper (%)	0255	0.0080	0.0020	0.0084	0.0011	0.0963	34	-0.41	221.30	0
221	Acid Soluble Copper (%)	0117	0.0080	0.0002	0.0084	0.0011	0.0963	34	-0.41	221.33	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				
221	Acid Soluble Copper (%)	0105	0.0081	0.0015	0.0084	0.0011	0.0963	34	-0.36	221.33	0
221	Acid Soluble Copper (%)	0483	0.0081	0.0003	0.0084	0.0011	0.0963	34	-0.36	221.30	0
221	Acid Soluble Copper (%)	0043	0.0081	0.0002	0.0084	0.0011	0.0963	34	-0.32	221.00	0
221	Acid Soluble Copper (%)	0096	0.0081	0.0002	0.0084	0.0011	0.0963	34	-0.32	221.30	0
221	Acid Soluble Copper (%)	0535	0.0083	0.0005	0.0084	0.0011	0.0963	34	-0.18	221.00	0
221	Acid Soluble Copper (%)	0541	0.0083	0.0014	0.0084	0.0011	0.0963	34	-0.13	221.30	0
221	Acid Soluble Copper (%)	0540	0.0085	0.0007	0.0084	0.0011	0.0963	34	0.00	221.00	0
221	Acid Soluble Copper (%)	0527	0.0085	0.0010	0.0084	0.0011	0.0963	34	0.05	221.33	0
221	Acid Soluble Copper (%)	0027	0.0085	0.0010	0.0084	0.0011	0.0963	34	0.05	221.99	0
221	Acid Soluble Copper (%)	0220	0.0085	0.0010	0.0084	0.0011	0.0963	34	0.05	221.99	0
221	Acid Soluble Copper (%)	0515	0.0085	0.0004	0.0084	0.0011	0.0963	34	0.05	221.99	0
221	Acid Soluble Copper (%)	0523	0.0085	0.0010	0.0084	0.0011	0.0963	34	0.05	221.99	0
221	Acid Soluble Copper (%)	0230	0.0086	0.0001	0.0084	0.0011	0.0963	34	0.09	221.30	0
221	Acid Soluble Copper (%)	0494	0.0090	0.0003	0.0084	0.0011	0.0963	34	0.45	221.33	0
221	Acid Soluble Copper (%)	0423	0.0090	0.0000	0.0084	0.0011	0.0963	34	0.50	221.32	0
221	Acid Soluble Copper (%)	0200	0.0092	0.0017	0.0084	0.0011	0.0963	34	0.64	221.00	0
221	Acid Soluble Copper (%)	0515	0.0094	0.0026	0.0084	0.0011	0.0963	34	0.86	221.33	0
221	Acid Soluble Copper (%)	0472	0.0100	0.0000	0.0084	0.0011	0.0963	34	1.41	221.30	0
221	Acid Soluble Copper (%)	0482	0.0100	0.0000	0.0084	0.0011	0.0963	34	1.41	221.30	0
221	Acid Soluble Copper (%)	0506	0.0100	0.0000	0.0084	0.0011	0.0963	34	1.41	221.99	0
221	Acid Soluble Copper (%)	0354	0.0110	0.0000	0.0084	0.0011	0.0963	34	2.31	221.30	0
221	Acid Soluble Copper (%)	0368	0.0114	0.0050	0.0084	0.0011	0.0963	34	2.68	221.99	0
221	Acid Soluble Copper (%)	0086	76.74	3.251	0.0084	0.0011	0.0963	34	69574.07	221.33	0
221	Acid Soluble Copper (%)	0037	85.23	7.750	0.0084	0.0011	0.0963	34	77263.06	221.33	1
241	Acid Soluble Iron (1%)	0518	0.1150*	0.0300	1.097	0.1251	0.0410	63	-7.85	241.20	0
241	Acid Soluble Iron (1%)	0476	0.2700*	0.0160	1.097	0.1251	0.0410	63	-6.61	241.99	0
241	Acid Soluble Iron (1%)	0402	0.4500*	0.0800	1.097	0.1251	0.0410	63	-5.17	241.30	0
241	Acid Soluble Iron (1%)	0472	0.7450*	0.0100	1.097	0.1251	0.0410	63	-2.81	241.30	0
241	Acid Soluble Iron (1%)	0524	0.7813*	0.0084	1.097	0.1251	0.0410	63	-2.52	241.99	0
241	Acid Soluble Iron (1%)	0543	0.7920*	0.0180	1.097	0.1251	0.0410	63	-2.44	241.30	0
241	Acid Soluble Iron (1%)	0042	0.8550*	0.0300	1.097	0.1251	0.0410	63	-1.93	241.99	0
241	Acid Soluble Iron (1%)	0231	0.8950*	0.0100	1.097	0.1251	0.0410	63	-1.61	241.30	0
241	Acid Soluble Iron (1%)	0523	0.8950*	0.0300	1.097	0.1251	0.0410	63	-1.61	241.99	0
241	Acid Soluble Iron (1%)	0035	0.9410*	0.0020	1.097	0.1251	0.0410	63	-1.25	241.30	0
241	Acid Soluble Iron (1%)	0137	0.9505*	0.0090	1.097	0.1251	0.0410	63	-1.17	241.99	0
241	Acid Soluble Iron (1%)	0513	0.9700*	0.0400	1.097	0.1251	0.0410	63	-1.01	241.00	0
241	Acid Soluble Iron (1%)	0043	0.9850	0.0500	1.097	0.1251	0.0410	63	-0.89	241.00	0
241	Acid Soluble Iron (1%)	0486	0.9950	0.0500	1.097	0.1251	0.0410	63	-0.81	241.33	0
241	Acid Soluble Iron (1%)	0397	1.009	0.0100	1.097	0.1251	0.0410	63	-0.70	241.33	0
241	Acid Soluble Iron (1%)	0291	1.020	0.0200	1.097	0.1251	0.0410	63	-0.61	241.30	0
241	Acid Soluble Iron (1%)	0377	1.036	0.0020	1.097	0.1251	0.0410	63	-0.49	241.30	0
241	Acid Soluble Iron (1%)	0500	1.040	0.0000	1.097	0.1251	0.0410	63	-0.46	241.00	0
241	Acid Soluble Iron (1%)	0394	1.045	0.0100	1.097	0.1251	0.0410	63	-0.42	241.32	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 (1%)	0234	1.050	0.0600	1.097	0.1251	0.0410	63	-0.38	241.30	0
241	Acid Soluble Iron (1%)	0508	1.059	0.0600	1.097	0.1251	0.0410	63	-0.30	241.99	0
241	Acid Soluble Iron (1%)	0515	1.069	0.0341	1.097	0.1251	0.0410	63	-0.22	241.99	0
241	Acid Soluble Iron (1%)	0136	1.075	0.0300	1.097	0.1251	0.0410	63	-0.18	241.33	0
241	Acid Soluble Iron (1%)	0086	1.077	0.0373	1.097	0.1251	0.0410	63	-0.16	241.33	0
241	Acid Soluble Iron (1%)	0534	1.080	0.0200	1.097	0.1251	0.0410	63	-0.14	241.00	0
241	Acid Soluble Iron (1%)	0521	1.089	0.0000	1.097	0.1251	0.0410	63	-0.06	241.32	0
241	Acid Soluble Iron (1%)	0532	1.090	0.0200	1.097	0.1251	0.0410	63	-0.06	241.00	0
241	Acid Soluble Iron (1%)	0433	1.095	0.0100	1.097	0.1251	0.0410	63	-0.02	241.30	0
241	Acid Soluble Iron (1%)	0423	1.095	0.0100	1.097	0.1251	0.0410	63	-0.02	241.32	0
241	Acid Soluble Iron (1%)	0041	1.100	0.0000	1.097	0.1251	0.0410	63	0.02	241.30	0
241	Acid Soluble Iron (1%)	0255	1.101	0.0718	1.097	0.1251	0.0410	63	0.03	241.30	0
241	Acid Soluble Iron (1%)	0540	1.105	0.0100	1.097	0.1251	0.0410	63	0.06	241.00	0
241	Acid Soluble Iron (1%)	0535	1.110	0.0200	1.097	0.1251	0.0410	63	0.10	241.00	0
241	Acid Soluble Iron (1%)	0027	1.113	0.2490	1.097	0.1251	0.0410	63	0.12	241.99	0
241	Acid Soluble Iron (1%)	0114	1.115	0.0865	1.097	0.1251	0.0410	63	0.14	241.30	0
241	Acid Soluble Iron (1%)	0200	1.130	0.1200	1.097	0.1251	0.0410	63	0.26	241.00	0
241	Acid Soluble Iron (1%)	0230	1.135	0.0300	1.097	0.1251	0.0410	63	0.30	241.30	0
241	Acid Soluble Iron (1%)	0102	1.138	0.0350	1.097	0.1251	0.0410	63	0.33	241.30	0
241	Acid Soluble Iron (1%)	0037	1.138	0.0660	1.097	0.1251	0.0410	63	0.33	241.33	0
241	Acid Soluble Iron (1%)	0096	1.145	0.0100	1.097	0.1251	0.0410	63	0.38	241.30	0
241	Acid Soluble Iron (1%)	0506	1.160	0.0800	1.097	0.1251	0.0410	63	0.50	241.99	0
241	Acid Soluble Iron (1%)	0324	1.170	0.0200	1.097	0.1251	0.0410	63	0.58	241.30	0
241	Acid Soluble Iron (1%)	0105	1.174	0.0100	1.097	0.1251	0.0410	63	0.62	241.00	0
241	Acid Soluble Iron (1%)	0368	1.184	0.1664	1.097	0.1251	0.0410	63	0.69	241.99	0
241	Acid Soluble Iron (1%)	0444	1.185	0.0100	1.097	0.1251	0.0410	63	0.70	241.30	0
241	Acid Soluble Iron (1%)	0485	1.187	0.1020	1.097	0.1251	0.0410	63	0.72	241.00	0
241	Acid Soluble Iron (1%)	0040	1.190	0.0800	1.097	0.1251	0.0410	63	0.74	241.00	0
241	Acid Soluble Iron (1%)	0055	1.190	0.0600	1.097	0.1251	0.0410	63	0.74	241.33	0
241	Acid Soluble Iron (1%)	0117	1.190	0.0200	1.097	0.1251	0.0410	63	0.74	241.33	0
241	Acid Soluble Iron (1%)	0009	1.200	0.2000	1.097	0.1251	0.0410	63	0.82	241.33	0
241	Acid Soluble Iron (1%)	0515	1.203	0.0206	1.097	0.1251	0.0410	63	0.85	241.33	0
241	Acid Soluble Iron (1%)	0157	1.205	0.0300	1.097	0.1251	0.0410	63	0.86	241.30	0
241	Acid Soluble Iron (1%)	0025	1.205	0.0520	1.097	0.1251	0.0410	63	0.86	241.33	0
241	Acid Soluble Iron (1%)	0527	1.208	0.0450	1.097	0.1251	0.0410	63	0.88	241.33	0
241	Acid Soluble Iron (1%)	0494	1.210	0.0244	1.097	0.1251	0.0410	63	0.91	241.33	0
241	Acid Soluble Iron (1%)	0354	1.224	0.0151	1.097	0.1251	0.0410	63	1.01	241.30	0
241	Acid Soluble Iron (1%)	0483	1.225	0.0700	1.097	0.1251	0.0410	63	1.02	241.30	0
241	Acid Soluble Iron (1%)	0034	1.229	0.0120	1.097	0.1251	0.0410	63	1.06	241.33	0
241	Acid Soluble Iron (1%)	0360	1.230	0.0200	1.097	0.1251	0.0410	63	1.06	241.30	0
241	Acid Soluble Iron (1%)	0177	1.238	0.0372	1.097	0.1251	0.0410	63	1.13	241.33	0
241	Acid Soluble Iron (1%)	0371	1.265	0.0100	1.097	0.1251	0.0410	63	1.34	241.30	0
241	Acid Soluble Iron (1%)	0482	1.270	0.0200	1.097	0.1251	0.0410	63	1.38	241.30	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				
241	Acid Soluble Iron (1%)	0029	1.281	0.0740	1.097	0.1251	0.0410	63	1.47	241.00	0
241	Acid Soluble Iron (1%)	0023	0.9775*	0.5690	1.097	0.1251	0.0410	63	-0.95	241.33	1
251	Acid Soluble Lead (ppm)	0200	0.0100	0.0000	3.267	1.054	0.4352	22	-3.09	251.99	0
251	Acid Soluble Lead (ppm)	0368	1.150	0.1000	3.267	1.054	0.4352	22	-2.01	251.30	0
251	Acid Soluble Lead (ppm)	0255	1.475	0.1223	3.267	1.054	0.4352	22	-1.70	251.30	0
251	Acid Soluble Lead (ppm)	0523	2.135	0.1500	3.267	1.054	0.4352	22	-1.07	251.30	0
251	Acid Soluble Lead (ppm)	0444	2.475	0.1500	3.267	1.054	0.4352	22	-0.75	251.30	0
251	Acid Soluble Lead (ppm)	0096	2.700	1.000	3.267	1.054	0.4352	22	-0.54	251.30	0
251	Acid Soluble Lead (ppm)	0476	2.780	0.1400	3.267	1.054	0.4352	22	-0.46	251.99	0
251	Acid Soluble Lead (ppm)	0524	3.010	0.0436	3.267	1.054	0.4352	22	-0.24	251.30	0
251	Acid Soluble Lead (ppm)	0086	3.226	0.2810	3.267	1.054	0.4352	22	-0.04	251.33	0
251	Acid Soluble Lead (ppm)	0529	3.245	0.0100	3.267	1.054	0.4352	22	-0.02	251.30	0
251	Acid Soluble Lead (ppm)	0230	3.275	0.1700	3.267	1.054	0.4352	22	0.01	251.34	0
251	Acid Soluble Lead (ppm)	0009	3.300	0.4000	3.267	1.054	0.4352	22	0.03	251.33	0
251	Acid Soluble Lead (ppm)	0136	3.500	1.000	3.267	1.054	0.4352	22	0.22	251.00	0
251	Acid Soluble Lead (ppm)	0009	3.600	0.6000	3.267	1.054	0.4352	22	0.32	251.99	0
251	Acid Soluble Lead (ppm)	0515	3.630	1.401	3.267	1.054	0.4352	22	0.34	251.33	0
251	Acid Soluble Lead (ppm)	0037	3.790	0.1800	3.267	1.054	0.4352	22	0.50	251.33	0
251	Acid Soluble Lead (ppm)	0494	4.137	0.1797	3.267	1.054	0.4352	22	0.83	251.33	0
251	Acid Soluble Lead (ppm)	0394	4.200	0.3800	3.267	1.054	0.4352	22	0.89	251.30	0
251	Acid Soluble Lead (ppm)	0515	4.200	0.2320	3.267	1.054	0.4352	22	0.89	251.34	0
251	Acid Soluble Lead (ppm)	0105	4.210	2.425	3.267	1.054	0.4352	22	0.89	251.33	0
251	Acid Soluble Lead (ppm)	0220	4.550	0.3000	3.267	1.054	0.4352	22	1.22	251.99	0
251	Acid Soluble Lead (ppm)	0527	4.864	0.3100	3.267	1.054	0.4352	22	1.52	251.33	0
251	Acid Soluble Lead (ppm)	0541	17.30	3.200	3.267	1.054	0.4352	22	13.32	251.30	2
261	Acid Soluble Manganese (%)	0515	0.0208	0.0189	0.0375	0.0035	0.0025	20	-4.84	261.35	0
261	Acid Soluble Manganese (%)	0524	0.0280	0.0011	0.0375	0.0035	0.0025	20	-2.75	261.99	0
261	Acid Soluble Manganese (%)	0472	0.0300	0.0000	0.0375	0.0035	0.0025	20	-2.16	261.30	0
261	Acid Soluble Manganese (%)	0423	0.0335	0.0010	0.0375	0.0035	0.0025	20	-1.15	261.34	0
261	Acid Soluble Manganese (%)	0521	0.0351	0.0000	0.0375	0.0035	0.0025	20	-0.68	261.34	0
261	Acid Soluble Manganese (%)	0483	0.0362	0.0011	0.0375	0.0035	0.0025	20	-0.38	261.32	0
261	Acid Soluble Manganese (%)	0354	0.0370	0.0020	0.0375	0.0035	0.0025	20	-0.13	261.30	0
261	Acid Soluble Manganese (%)	0117	0.0372	0.0003	0.0375	0.0035	0.0025	20	-0.09	261.35	0
261	Acid Soluble Manganese (%)	0096	0.0375	0.0025	0.0375	0.0035	0.0025	20	0.00	261.30	0
261	Acid Soluble Manganese (%)	0009	0.0375	0.0030	0.0375	0.0035	0.0025	20	0.01	261.35	0
261	Acid Soluble Manganese (%)	0035	0.0379	0.0010	0.0375	0.0035	0.0025	20	0.13	261.30	0
261	Acid Soluble Manganese (%)	0515	0.0380	0.0017	0.0375	0.0035	0.0025	20	0.14	261.99	0
261	Acid Soluble Manganese (%)	0105	0.0384	0.0036	0.0375	0.0035	0.0025	20	0.27	261.12	0
261	Acid Soluble Manganese (%)	0482	0.0400	0.0000	0.0375	0.0035	0.0025	20	0.73	261.31	0
261	Acid Soluble Manganese (%)	0402	0.0400	0.0000	0.0375	0.0035	0.0025	20	0.73	261.32	0
261	Acid Soluble Manganese (%)	0527	0.0405	0.0030	0.0375	0.0035	0.0025	20	0.88	261.35	0
261	Acid Soluble Manganese (%)	0535	0.0408	0.0005	0.0375	0.0035	0.0025	20	0.95	261.12	0
261	Acid Soluble Manganese (%)	0540	0.0410	0.0003	0.0375	0.0035	0.0025	20	1.01	261.12	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
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261	Acid Soluble Manganese (%)	0041	0.0410	0.0060	0.0375	0.0035	0.0025	20	1.02	261.30	0
261	Acid Soluble Manganese (%)	0494	0.0412	0.0031	0.0375	0.0035	0.0025	20	1.07	261.35	0
261	Acid Soluble Manganese (%)	0086	358.6	15.21	0.0375	0.0035	0.0025	20	103811.55	261.33	2
281	Acid Soluble Mercury (ppm)	0394	0.0041	0.0004				1		281.30	0
281	Acid Soluble Mercury (ppm)	0515	0.0000	0.0000				1		281.30	4
281	Acid Soluble Mercury (ppm)	0541	0.0000	0.0000				1		281.30	4
289	Acid Soluble Molybdenum (ppm)	0521	3.161	0.0000	9.702	2.515	0.7744	24	-2.60	289.30	0
289	Acid Soluble Molybdenum (ppm)	0476	5.655	1.430	9.702	2.515	0.7744	24	-1.61	289.99	0
289	Acid Soluble Molybdenum (ppm)	0423	6.670	0.3000	9.702	2.515	0.7744	24	-1.21	289.33	0
289	Acid Soluble Molybdenum (ppm)	0035	7.090	0.9800	9.702	2.515	0.7744	24	-1.04	289.30	0
289	Acid Soluble Molybdenum (ppm)	0524	7.412	0.0656	9.702	2.515	0.7744	24	-0.91	289.30	0
289	Acid Soluble Molybdenum (ppm)	0433	7.702	0.0410	9.702	2.515	0.7744	24	-0.80	289.30	0
289	Acid Soluble Molybdenum (ppm)	0515	8.270	3.043	9.702	2.515	0.7744	24	-0.57	289.33	0
289	Acid Soluble Molybdenum (ppm)	0255	8.427	0.7653	9.702	2.515	0.7744	24	-0.51	289.30	0
289	Acid Soluble Molybdenum (ppm)	0096	8.850	0.7000	9.702	2.515	0.7744	24	-0.34	289.30	0
289	Acid Soluble Molybdenum (ppm)	0394	8.920	0.1400	9.702	2.515	0.7744	24	-0.31	289.32	0
289	Acid Soluble Molybdenum (ppm)	0541	9.000	0.4000	9.702	2.515	0.7744	24	-0.28	289.30	0
289	Acid Soluble Molybdenum (ppm)	0515	10.10	0.0890	9.702	2.515	0.7744	24	0.16	289.34	0
289	Acid Soluble Molybdenum (ppm)	0506	10.30	0.2000	9.702	2.515	0.7744	24	0.24	289.99	0
289	Acid Soluble Molybdenum (ppm)	0494	10.32	0.6598	9.702	2.515	0.7744	24	0.24	289.33	0
289	Acid Soluble Molybdenum (ppm)	0117	10.33	1.734	9.702	2.515	0.7744	24	0.25	289.33	0
289	Acid Soluble Molybdenum (ppm)	0105	10.61	2.704	9.702	2.515	0.7744	24	0.36	289.33	0
289	Acid Soluble Molybdenum (ppm)	0086	10.84	0.3580	9.702	2.515	0.7744	24	0.45	289.33	0
289	Acid Soluble Molybdenum (ppm)	0230	11.45	0.1000	9.702	2.515	0.7744	24	0.70	289.34	0
289	Acid Soluble Molybdenum (ppm)	0037	11.58	0.6630	9.702	2.515	0.7744	24	0.75	289.33	0
289	Acid Soluble Molybdenum (ppm)	0009	12.00	2.000	9.702	2.515	0.7744	24	0.91	289.33	0
289	Acid Soluble Molybdenum (ppm)	0527	12.28	0.1140	9.702	2.515	0.7744	24	1.03	289.33	0
289	Acid Soluble Molybdenum (ppm)	0009	12.50	1.000	9.702	2.515	0.7744	24	1.11	289.99	0
289	Acid Soluble Molybdenum (ppm)	0220	12.85	0.1000	9.702	2.515	0.7744	24	1.25	289.99	0
289	Acid Soluble Molybdenum (ppm)	0368	16.70	1.000	9.702	2.515	0.7744	24	2.78	289.30	0
291	Acid Soluble Nickel (ppm)	0521	18.16	0.0000	53.54	12.20	2.241	26	-2.90	291.30	0
291	Acid Soluble Nickel (ppm)	0476	29.22	7.010	53.54	12.20	2.241	26	-1.99	291.99	0
291	Acid Soluble Nickel (ppm)	0255	33.57	6.373	53.54	12.20	2.241	26	-1.64	291.99	0
291	Acid Soluble Nickel (ppm)	0444	34.66	1.140	53.54	12.20	2.241	26	-1.55	291.30	0
291	Acid Soluble Nickel (ppm)	0524	39.06	0.0242	53.54	12.20	2.241	26	-1.19	291.30	0
291	Acid Soluble Nickel (ppm)	0482	43.05	3.700	53.54	12.20	2.241	26	-0.86	291.30	0
291	Acid Soluble Nickel (ppm)	0529	44.49	0.0800	53.54	12.20	2.241	26	-0.74	291.30	0
291	Acid Soluble Nickel (ppm)	0035	45.35	3.500	53.54	12.20	2.241	26	-0.67	291.30	0
291	Acid Soluble Nickel (ppm)	0394	50.50	0.2000	53.54	12.20	2.241	26	-0.25	291.30	0
291	Acid Soluble Nickel (ppm)	0541	53.65	0.7000	53.54	12.20	2.241	26	0.01	291.30	0
291	Acid Soluble Nickel (ppm)	0027	55.04	0.6790	53.54	12.20	2.241	26	0.12	291.99	0
291	Acid Soluble Nickel (ppm)	0494	56.46	2.716	53.54	12.20	2.241	26	0.24	291.33	0
291	Acid Soluble Nickel (ppm)	0515	56.82	2.707	53.54	12.20	2.241	26	0.27	291.33	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				
291	Acid Soluble Nickel (ppm)	0515	57.48	0.1960	53.54	12.20	2.241	26	0.32	291.34	0
291	Acid Soluble Nickel (ppm)	0220	57.50	1.000	53.54	12.20	2.241	26	0.32	291.99	0
291	Acid Soluble Nickel (ppm)	0096	58.20	2.800	53.54	12.20	2.241	26	0.38	291.30	0
291	Acid Soluble Nickel (ppm)	0117	61.04	0.4200	53.54	12.20	2.241	26	0.61	291.33	0
291	Acid Soluble Nickel (ppm)	0009	62.00	2.000	53.54	12.20	2.241	26	0.69	291.99	0
291	Acid Soluble Nickel (ppm)	0037	62.19	3.713	53.54	12.20	2.241	26	0.71	291.33	0
291	Acid Soluble Nickel (ppm)	0506	62.25	2.500	53.54	12.20	2.241	26	0.71	291.99	0
291	Acid Soluble Nickel (ppm)	0527	62.53	0.3090	53.54	12.20	2.241	26	0.74	291.33	0
291	Acid Soluble Nickel (ppm)	0368	62.55	3.900	53.54	12.20	2.241	26	0.74	291.30	0
291	Acid Soluble Nickel (ppm)	0009	63.50	5.000	53.54	12.20	2.241	26	0.82	291.33	0
291	Acid Soluble Nickel (ppm)	0230	63.55	0.1000	53.54	12.20	2.241	26	0.82	291.34	0
291	Acid Soluble Nickel (ppm)	0136	65.50	1.000	53.54	12.20	2.241	26	0.98	291.00	0
291	Acid Soluble Nickel (ppm)	0105	68.35	6.510	53.54	12.20	2.241	26	1.21	291.33	0
291	Acid Soluble Nickel (ppm)	0086	41.69	29.85	53.54	12.20	2.241	26	-0.97	291.33	1
301	Acid Soluble Selenium (ppm)	0394	0.0110	0.0040	0.1138	0.0960	0.0492	5	-0.93	301.30	0
301	Acid Soluble Selenium (ppm)	0527	0.0690	0.0400	0.1138	0.0960	0.0492	5	-0.41	301.33	0
301	Acid Soluble Selenium (ppm)	0529	0.1000	0.0000	0.1138	0.0960	0.0492	5	-0.13	301.30	0
301	Acid Soluble Selenium (ppm)	0009	0.1200	0.0200	0.1138	0.0960	0.0492	5	0.06	301.99	0
301	Acid Soluble Selenium (ppm)	0255	0.2690	0.1820	0.1138	0.0960	0.0492	5	1.41	301.99	0
301	Acid Soluble Selenium (ppm)	0368	0.0000	0.0000	0.1138	0.0960	0.0492	5		301.30	4
301	Acid Soluble Selenium (ppm)	0541	0.0000	0.0000	0.1138	0.0960	0.0492	5		301.30	4
301	Acid Soluble Selenium (ppm)	0009	0.0000	0.0000	0.1138	0.0960	0.0492	5		301.33	4
301	Acid Soluble Selenium (ppm)	0515	0.0000	0.0000	0.1138	0.0960	0.0492	5		301.33	4
301	Acid Soluble Selenium (ppm)	0515	0.0000	0.0000	0.1138	0.0960	0.0492	5		301.34	4
311	Sodium (%)	0009	0.0325	0.0030	0.0467	0.0159	0.0050	10	-0.83	311.33	0
311	Sodium (%)	0494	0.0339	0.0000	0.0467	0.0159	0.0050	10	-0.75	311.33	0
311	Sodium (%)	0521	0.0355	0.0000	0.0467	0.0159	0.0050	10	-0.66	311.32	0
311	Sodium (%)	0423	0.0395	0.0010	0.0467	0.0159	0.0050	10	-0.42	311.33	0
311	Sodium (%)	0482	0.0400	0.0000	0.0467	0.0159	0.0050	10	-0.39	311.99	0
311	Sodium (%)	0096	0.0450	0.0100	0.0467	0.0159	0.0050	10	-0.10	311.99	0
311	Sodium (%)	0086	0.0467	0.0005	0.0467	0.0159	0.0050	10	0.00	311.33	0
311	Sodium (%)	0527	0.0530	0.0140	0.0467	0.0159	0.0050	10	0.37	311.33	0
311	Sodium (%)	0354	0.1005	0.0170	0.0467	0.0159	0.0050	10	3.14	311.99	0
311	Sodium (%)	0035	0.1580	0.0040	0.0467	0.0159	0.0050	10	6.51	311.33	0
321	Acid Soluble Zinc (%)	0476	0.0255	0.0010	0.0337	0.0038	0.0031	36	-2.14	321.99	0
321	Acid Soluble Zinc (%)	0027	0.0280	0.0020	0.0337	0.0038	0.0031	36	-1.49	321.99	0
321	Acid Soluble Zinc (%)	0524	0.0288	0.0011	0.0337	0.0038	0.0031	36	-1.30	321.99	0
321	Acid Soluble Zinc (%)	0521	0.0290	0.0000	0.0337	0.0038	0.0031	36	-1.23	321.32	0
321	Acid Soluble Zinc (%)	0433	0.0295	0.0010	0.0337	0.0038	0.0031	36	-1.10	321.30	0
321	Acid Soluble Zinc (%)	0472	0.0300	0.0000	0.0337	0.0038	0.0031	36	-0.97	321.30	0
321	Acid Soluble Zinc (%)	0009	0.0305	0.0050	0.0337	0.0038	0.0031	36	-0.84	321.33	0
321	Acid Soluble Zinc (%)	0523	0.0315	0.0010	0.0337	0.0038	0.0031	36	-0.58	321.99	0
321	Acid Soluble Zinc (%)	0532	0.0316	0.0005	0.0337	0.0038	0.0031	36	-0.57	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 (%)	0105	0.0316	0.0015	0.0337	0.0038	0.0031	36	-0.57	321.33	0
321	Acid Soluble Zinc (%)	0533	0.0317	0.0001	0.0337	0.0038	0.0031	36	-0.54	321.00	0
321	Acid Soluble Zinc (%)	0535	0.0318	0.0006	0.0337	0.0038	0.0031	36	-0.50	321.00	0
321	Acid Soluble Zinc (%)	0117	0.0323	0.0001	0.0337	0.0038	0.0031	36	-0.39	321.33	0
321	Acid Soluble Zinc (%)	0483	0.0329	0.0003	0.0337	0.0038	0.0031	36	-0.23	321.30	0
321	Acid Soluble Zinc (%)	0041	0.0330	0.0020	0.0337	0.0038	0.0031	36	-0.19	321.30	0
321	Acid Soluble Zinc (%)	0515	0.0330	0.0028	0.0337	0.0038	0.0031	36	-0.19	321.33	0
321	Acid Soluble Zinc (%)	0540	0.0332	0.0007	0.0337	0.0038	0.0031	36	-0.15	321.00	0
321	Acid Soluble Zinc (%)	0394	0.0332	0.0018	0.0337	0.0038	0.0031	36	-0.14	321.32	0
321	Acid Soluble Zinc (%)	0527	0.0335	0.0030	0.0337	0.0038	0.0031	36	-0.06	321.33	0
321	Acid Soluble Zinc (%)	0307	0.0335	0.0010	0.0337	0.0038	0.0031	36	-0.06	321.99	0
321	Acid Soluble Zinc (%)	0230	0.0340	0.0011	0.0337	0.0038	0.0031	36	0.06	321.30	0
321	Acid Soluble Zinc (%)	0515	0.0341	0.0012	0.0337	0.0038	0.0031	36	0.09	321.99	0
321	Acid Soluble Zinc (%)	0423	0.0345	0.0010	0.0337	0.0038	0.0031	36	0.20	321.32	0
321	Acid Soluble Zinc (%)	0220	0.0345	0.0030	0.0337	0.0038	0.0031	36	0.20	321.33	0
321	Acid Soluble Zinc (%)	0105	0.0354	0.0029	0.0337	0.0038	0.0031	36	0.42	321.00	0
321	Acid Soluble Zinc (%)	0200	0.0354	0.0093	0.0337	0.0038	0.0031	36	0.42	321.00	0
321	Acid Soluble Zinc (%)	0494	0.0354	0.0009	0.0337	0.0038	0.0031	36	0.42	321.33	0
321	Acid Soluble Zinc (%)	0043	0.0359	0.0014	0.0337	0.0038	0.0031	36	0.56	321.00	0
321	Acid Soluble Zinc (%)	0096	0.0369	0.0020	0.0337	0.0038	0.0031	36	0.82	321.30	0
321	Acid Soluble Zinc (%)	0255	0.0370	0.0100	0.0337	0.0038	0.0031	36	0.85	321.30	0
321	Acid Soluble Zinc (%)	0368	0.0380	0.0063	0.0337	0.0038	0.0031	36	1.10	321.99	0
321	Acid Soluble Zinc (%)	0482	0.0400	0.0000	0.0337	0.0038	0.0031	36	1.63	321.30	0
321	Acid Soluble Zinc (%)	0506	0.0400	0.0000	0.0337	0.0038	0.0031	36	1.63	321.99	0
321	Acid Soluble Zinc (%)	0035	0.0435	0.0030	0.0337	0.0038	0.0031	36	2.54	321.30	0
321	Acid Soluble Zinc (%)	0354	0.0510	0.0100	0.0337	0.0038	0.0031	36	4.49	321.30	0
321	Acid Soluble Zinc (%)	0428	1.178	0.0334	0.0337	0.0038	0.0031	36	297.82	321.00	0
321	Acid Soluble Zinc (%)	0086	328.0	15.79	0.0337	0.0038	0.0031	36	85383.91	321.33	2
325	Water Soluble Zinc (%)	0402	0.0350	0.0100				1		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 and a 4 flag indicates rejected due to 0 value submitted. 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 included for information only (Grey). An offset lab value with an asterix 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.