

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Analyte Proficiency From All Labs

Sample # 160611

WS 25-5-15

Statistical Summary

Analytes: 38

Labs Reporting: 76

Issue Date : 07/31/2016

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 (%)	23	22	11.10	1.520	10.83		0.7742	0.1651	7.15%		0.1168	2.79%
002	Nitrate Nitrogen (%)	16	16	14.36	0.6862	14.36		0.5631	0.1408	3.92%		0.1409	2.68%
003	Water Insoluble Nitrogen (%)	1		10.95									
009	Ammoniacal Plus Nitrate Nitrogen (%)	9	9	22.69	4.498	23.99		0.9752	0.3251	4.07%		0.0522	2.48%
010	Total Nitrogen (25%)	65	62	24.37	2.244	24.23	0.7834	1.702	0.2162	7.03%	1.62%	0.4696	2.48%
020	Total Phosphorus as P2O5 (%)	44	41	4.901	0.8306	4.967		0.5962	0.0931	12.00%		0.1969	3.14%
030	Citrate Insoluble Phosphorus as P2O5 (%)	1		0.0150									
040	Indirect Available Phosphorus as P2O5 (5%)	3	3	4.567	0.9799	4.567	0.6700	0.9799	0.5657	21.46%	7.34%	0.2467	3.18%
041	Direct Available Phosphorus as P2O5 (5%)	37	36	4.951	0.6286	4.929	0.6700	0.5275	0.0879	10.70%	6.80%	0.2639	3.15%
042	Water Soluble Orthophosphate as P2O5 (%)	1		5.130									
048	Water Soluble Phosphorus as P2O5 (%)	3	3	4.594	1.646	4.594		1.646	0.9503	35.83%		0.0920	3.18%
050	Soluble Potassium as K2O (15%)	75	72	13.81	3.141	14.08	0.8728	1.803	0.2125	12.81%	3.10%	0.4876	2.69%
060	Water (Free) (%)	5	5	0.7810	0.3671	0.7810		0.3671	0.1642	47.00%		0.0260	4.15%
101	Acid Soluble Calcium (%)	11	10	0.0131	0.0024	0.0128		0.0012	0.0004	9.77%		0.0018	7.71%
121	Acid Soluble Magnesium (0.1%)	43	41	0.2707	0.0738	0.2700	0.2135	0.0295	0.0046	10.94%	39.54%	0.0097	4.87%
131	Water Soluble Magnesium (%)	9	9	0.3031	0.0938	0.3026		0.1052	0.0351	34.76%		0.0140	4.79%
143	Elemental Sulfur (%)	4	4	0.2089	0.0326	0.2089		0.0326	0.0163	15.60%		0.0078	5.06%
145	Sulfate Sulfur, HCl soluble (%)	5	5	0.2375	0.0503	0.2375		0.0503	0.0225	21.17%		0.0329	4.97%
148	Total Sulfur (0.13%)	25	24	0.2400	0.1870	0.2055	0.2103	0.0558	0.0114	27.15%	51.17%	0.0276	5.08%
149	Sulfur - HNO3 soluble (%)	3	3	0.2251	0.0293	0.2251		0.0293	0.0169	13.00%		0.0088	5.01%
151	Acid Soluble Arsenic (ppm)	6	4	0.0529	0.0500	0.0529		0.0500	0.0250	94.61%		0.0498	24.90%
165	Acid Soluble Boron (0.025%)	35	34	0.0221	0.0068	0.0226	0.0064	0.0034	0.0006	15.06%	14.15%	0.0010	7.08%
171	Water Soluble Boron (%)	3	3	0.0287	0.0019	0.0287		0.0019	0.0011	6.60%		0.0013	6.83%
181	Acid Soluble Cadmium (ppm)	7	5	0.0463	0.0381	0.0463		0.0381	0.0170	82.12%		0.0090	25.40%
191	Acid Soluble Chromium (ppm)	9	9	1.100	0.7720	1.088		0.8486	0.2829	77.97%		0.2450	15.79%
202	Acid Soluble Cobalt (ppm)	16	15	15.80	6.182	15.04		2.952	0.7623	19.63%		0.4880	10.64%
221	Acid Soluble Copper (0.0125%)	47	44	0.0119	0.0030	0.0120	0.0062	0.0019	0.0003	16.25%	25.90%	0.0008	7.79%
241	Acid Soluble Iron (0.125%)	46	45	0.1088	0.0331	0.1118	0.0162	0.0218	0.0032	19.47%	7.24%	0.0076	5.56%
251	Acid Soluble Lead (ppm)	7	5	0.2982	0.2881	0.2982		0.2881	0.1288	96.63%		0.1219	19.19%
261	Acid Soluble Manganese (0.063%)	47	46	0.0503	0.0153	0.0529	0.0103	0.0096	0.0014	18.20%	9.73%	0.0038	6.23%
271	Water Soluble Manganese (%)	3	3	0.0597	0.0099	0.0597		0.0099	0.0057	16.56%		0.0027	6.11%

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
281	Acid Soluble Mercury (ppm)	3	2	0.0063	0.0053	0.0063		0.0053	0.0037	83.95%		0.0001	34.32%
289	Acid Soluble Molybdenum (125ppm)	27	26	106.9	37.36	107.8	33.3530	23.02	4.514	21.34%	15.46%	5.909	7.91%
291	Acid Soluble Nickel (ppm)	8	6	0.3525	0.1370	0.3525		0.1554	0.0634	44.08%		0.2240	18.71%
301	Acid Soluble Selenium (ppm)	4	4	0.4271	0.3025	0.4271		0.3025	0.1513	70.83%		0.3053	18.18%
311	Sodium (%)	8	8	0.1741	0.0484	0.1810		0.0374	0.0132	20.66%		0.0038	5.17%
321	Acid Soluble Zinc (0.063%)	48	46	0.0562	0.0160	0.0573	0.0107	0.0116	0.0017	20.28%	9.36%	0.0035	6.15%
325	Water Soluble Zinc (%)	5	5	0.0756	0.0204	0.0756		0.0204	0.0091	27.02%		0.0116	5.90%

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Analyte Proficiency From All Labs

Analytes: 38

Sample # 160611

Lab Values

Labs Reporting: 76

WS 25-5-15

Issue Date : 07/31/2016

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 (%)	0230	8.935	0.1500	10.83	0.7742	0.1168	22	-2.45	001.10	0
001	Ammoniacal Nitrogen (%)	0444	9.790	0.1800	10.83	0.7742	0.1168	22	-1.35	001.10	0
001	Ammoniacal Nitrogen (%)	0498	10.00	0.2000	10.83	0.7742	0.1168	22	-1.07	001.10	0
001	Ammoniacal Nitrogen (%)	0423	10.33	0.0200	10.83	0.7742	0.1168	22	-0.65	001.99	0
001	Ammoniacal Nitrogen (%)	0487	10.45	0.1000	10.83	0.7742	0.1168	22	-0.49	001.99	0
001	Ammoniacal Nitrogen (%)	0027	10.51	0.0510	10.83	0.7742	0.1168	22	-0.42	001.99	0
001	Ammoniacal Nitrogen (%)	0394	10.53	0.0270	10.83	0.7742	0.1168	22	-0.39	001.99	0
001	Ammoniacal Nitrogen (%)	0513	10.54	0.0800	10.83	0.7742	0.1168	22	-0.38	001.10	0
001	Ammoniacal Nitrogen (%)	0513	10.59	0.0700	10.83	0.7742	0.1168	22	-0.32	001.99	0
001	Ammoniacal Nitrogen (%)	0309	10.62	0.3700	10.83	0.7742	0.1168	22	-0.28	001.10	0
001	Ammoniacal Nitrogen (%)	0456	10.62	0.0700	10.83	0.7742	0.1168	22	-0.28	001.10	0
001	Ammoniacal Nitrogen (%)	0520	10.70	0.0400	10.83	0.7742	0.1168	22	-0.17	001.99	0
001	Ammoniacal Nitrogen (%)	0510	10.79	0.0020	10.83	0.7742	0.1168	22	-0.05	001.99	0
001	Ammoniacal Nitrogen (%)	0519	10.80	0.0100	10.83	0.7742	0.1168	22	-0.05	001.99	0
001	Ammoniacal Nitrogen (%)	0493	10.83	0.0500	10.83	0.7742	0.1168	22	-0.01	001.99	0
001	Ammoniacal Nitrogen (%)	0231	10.87	0.2000	10.83	0.7742	0.1168	22	0.05	001.10	0
001	Ammoniacal Nitrogen (%)	0486	11.31	0.0800	10.83	0.7742	0.1168	22	0.62	001.10	0
001	Ammoniacal Nitrogen (%)	0220	11.55	0.4800	10.83	0.7742	0.1168	22	0.93	001.99	0
001	Ammoniacal Nitrogen (%)	0371	11.84	0.1200	10.83	0.7742	0.1168	22	1.30	001.99	0
001	Ammoniacal Nitrogen (%)	0506	12.15	0.1000	10.83	0.7742	0.1168	22	1.70	001.99	0
001	Ammoniacal Nitrogen (%)	0096	14.62	0.0300	10.83	0.7742	0.1168	22	4.89	001.99	0
001	Ammoniacal Nitrogen (%)	0420	15.94	0.1400	10.83	0.7742	0.1168	22	6.60	001.99	0
001	Ammoniacal Nitrogen (%)	0522	10.98	2.260	10.83	0.7742	0.1168	22	0.19	001.99	1
002	Nitrate Nitrogen (%)	0513	12.97	0.0400	14.36	0.5631	0.1409	16	-2.46	002.99	0
002	Nitrate Nitrogen (%)	0220	13.28	0.1700	14.36	0.5631	0.1409	16	-1.92	002.99	0
002	Nitrate Nitrogen (%)	0027	13.80	0.1130	14.36	0.5631	0.1409	16	-0.98	002.99	0
002	Nitrate Nitrogen (%)	0481	14.05	0.0100	14.36	0.5631	0.1409	16	-0.55	002.99	0
002	Nitrate Nitrogen (%)	0231	14.17	0.3600	14.36	0.5631	0.1409	16	-0.33	002.99	0
002	Nitrate Nitrogen (%)	0493	14.18	0.0500	14.36	0.5631	0.1409	16	-0.32	002.99	0
002	Nitrate Nitrogen (%)	0420	14.27	0.2700	14.36	0.5631	0.1409	16	-0.16	002.99	0
002	Nitrate Nitrogen (%)	0520	14.38	0.0200	14.36	0.5631	0.1409	16	0.04	002.99	0
002	Nitrate Nitrogen (%)	0423	14.39	0.2200	14.36	0.5631	0.1409	16	0.06	002.99	0
002	Nitrate Nitrogen (%)	0519	14.39	0.0200	14.36	0.5631	0.1409	16	0.06	002.99	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				
002	Nitrate Nitrogen (%)	0371	14.58	0.0300	14.36	0.5631	0.1409	16	0.39	002.99	0
002	Nitrate Nitrogen (%)	0498	14.65	0.5000	14.36	0.5631	0.1409	16	0.52	002.99	0
002	Nitrate Nitrogen (%)	0486	14.71	0.1900	14.36	0.5631	0.1409	16	0.62	002.99	0
002	Nitrate Nitrogen (%)	0394	14.72	0.0620	14.36	0.5631	0.1409	16	0.65	002.99	0
002	Nitrate Nitrogen (%)	0506	15.55	0.1000	14.36	0.5631	0.1409	16	2.12	002.99	0
002	Nitrate Nitrogen (%)	0230	15.65	0.1000	14.36	0.5631	0.1409	16	2.30	002.20	0
003	Water Insoluble Nitrogen (%)	0500	10.95	0.0600				1		003.99	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0481	10.82	0.1000	23.99	0.9752	0.0522	9	-12.81	009.10	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0090	23.18	0.0000	23.99	0.9752	0.0522	9	-0.78	009.10	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0513	23.54	0.0800	23.99	0.9752	0.0522	9	-0.43	009.10	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0513	23.57	0.0900	23.99	0.9752	0.0522	9	-0.41	009.99	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0444	23.95	0.1000	23.99	0.9752	0.0522	9	-0.03	009.10	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0309	24.46	0.0000	23.99	0.9752	0.0522	9	0.46	009.10	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0169	24.62	0.0400	23.99	0.9752	0.0522	9	0.62	009.10	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0493	24.98	0.0500	23.99	0.9752	0.0522	9	0.96	009.10	0
009	Ammoniacal Plus Nitrate Nitrogen (%)	0518	25.06	0.0100	23.99	0.9752	0.0522	9	1.04	009.99	0
010	Total Nitrogen (25%)	0451	19.37*	0.5800	24.23	1.702	0.4696	62	-2.85	010.60	0
010	Total Nitrogen (25%)	0457	19.65*	0.8710	24.23	1.702	0.4696	62	-2.69	010.60	0
010	Total Nitrogen (25%)	0049	20.98*	0.0400	24.23	1.702	0.4696	62	-1.91	010.60	0
010	Total Nitrogen (25%)	0037	21.60*	0.0200	24.23	1.702	0.4696	62	-1.54	010.60	0
010	Total Nitrogen (25%)	0230	21.75*	2.100	24.23	1.702	0.4696	62	-1.46	010.60	0
010	Total Nitrogen (25%)	0390	21.80*	0.2000	24.23	1.702	0.4696	62	-1.43	010.60	0
010	Total Nitrogen (25%)	0072	21.88*	0.3200	24.23	1.702	0.4696	62	-1.38	010.60	0
010	Total Nitrogen (25%)	0086	21.89*	1.323	24.23	1.702	0.4696	62	-1.37	010.60	0
010	Total Nitrogen (25%)	0095	22.20*	0.4100	24.23	1.702	0.4696	62	-1.19	010.60	0
010	Total Nitrogen (25%)	0035	22.51*	0.0500	24.23	1.702	0.4696	62	-1.01	010.60	0
010	Total Nitrogen (25%)	0177	22.54*	0.2520	24.23	1.702	0.4696	62	-0.99	010.60	0
010	Total Nitrogen (25%)	0043	22.92*	0.2900	24.23	1.702	0.4696	62	-0.77	010.60	0
010	Total Nitrogen (25%)	0105	22.95*	2.110	24.23	1.702	0.4696	62	-0.75	010.11	0
010	Total Nitrogen (25%)	0041	23.07*	0.0800	24.23	1.702	0.4696	62	-0.68	010.60	0
010	Total Nitrogen (25%)	0406	23.26*	0.3800	24.23	1.702	0.4696	62	-0.57	010.60	0
010	Total Nitrogen (25%)	0325	23.30*	0.8000	24.23	1.702	0.4696	62	-0.55	010.60	0
010	Total Nitrogen (25%)	0157	23.30*	1.000	24.23	1.702	0.4696	62	-0.55	010.60	0
010	Total Nitrogen (25%)	0025	23.39*	0.1520	24.23	1.702	0.4696	62	-0.49	010.60	0
010	Total Nitrogen (25%)	0356	23.42*	1.230	24.23	1.702	0.4696	62	-0.48	010.60	0
010	Total Nitrogen (25%)	0231	23.44*	0.0800	24.23	1.702	0.4696	62	-0.46	010.60	0
010	Total Nitrogen (25%)	0105	23.47	1.300	24.23	1.702	0.4696	62	-0.45	010.60	0
010	Total Nitrogen (25%)	0472	23.50	1.000	24.23	1.702	0.4696	62	-0.43	010.60	0
010	Total Nitrogen (25%)	0513	23.57	0.0900	24.23	1.702	0.4696	62	-0.39	010.99	0
010	Total Nitrogen (25%)	0234	23.67	0.0700	24.23	1.702	0.4696	62	-0.33	010.60	0
010	Total Nitrogen (25%)	0073	23.68	0.4000	24.23	1.702	0.4696	62	-0.32	010.60	0
010	Total Nitrogen (25%)	0481	23.82	0.0900	24.23	1.702	0.4696	62	-0.24	010.60	0
010	Total Nitrogen (25%)	0444	23.82	0.2600	24.23	1.702	0.4696	62	-0.24	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 (25%)	0354	24.02	0.4770	24.23	1.702	0.4696	62	-0.13	010.60	0
010	Total Nitrogen (25%)	0416	24.03	0.0600	24.23	1.702	0.4696	62	-0.12	010.12	0
010	Total Nitrogen (25%)	0292	24.28	0.0000	24.23	1.702	0.4696	62	0.03	010.60	0
010	Total Nitrogen (25%)	0523	24.30	0.2000	24.23	1.702	0.4696	62	0.04	010.60	0
010	Total Nitrogen (25%)	0102	24.37	0.4900	24.23	1.702	0.4696	62	0.08	010.60	0
010	Total Nitrogen (25%)	0211	24.40	0.0900	24.23	1.702	0.4696	62	0.10	010.12	0
010	Total Nitrogen (25%)	0486	24.49	0.8300	24.23	1.702	0.4696	62	0.15	010.60	0
010	Total Nitrogen (25%)	0423	24.62	0.0600	24.23	1.702	0.4696	62	0.23	010.60	0
010	Total Nitrogen (25%)	0498	24.65	0.3000	24.23	1.702	0.4696	62	0.25	010.12	0
010	Total Nitrogen (25%)	0309	24.67	0.0500	24.23	1.702	0.4696	62	0.26	010.11	0
010	Total Nitrogen (25%)	0500	24.83	0.0500	24.23	1.702	0.4696	62	0.35	010.11	0
010	Total Nitrogen (25%)	0027	24.91	0.2670	24.23	1.702	0.4696	62	0.40	010.60	0
010	Total Nitrogen (25%)	0481	25.04	0.1600	24.23	1.702	0.4696	62	0.48	010.12	0
010	Total Nitrogen (25%)	0520	25.08	0.0200	24.23	1.702	0.4696	62	0.50	010.99	0
010	Total Nitrogen (25%)	0519	25.19	0.0300	24.23	1.702	0.4696	62	0.56	010.99	0
010	Total Nitrogen (25%)	0007	25.20	0.8000	24.23	1.702	0.4696	62	0.57	010.60	0
010	Total Nitrogen (25%)	0291	25.26	0.0100	24.23	1.702	0.4696	62	0.60	010.60	0
010	Total Nitrogen (25%)	0510	25.26	0.0500	24.23	1.702	0.4696	62	0.61	010.11	0
010	Total Nitrogen (25%)	0452	25.27	0.0400	24.23	1.702	0.4696	62	0.61	010.60	0
010	Total Nitrogen (25%)	0402	25.30	0.6600	24.23	1.702	0.4696	62	0.63	010.60	0
010	Total Nitrogen (25%)	0055	25.31	0.0300	24.23	1.702	0.4696	62	0.63	010.60	0
010	Total Nitrogen (25%)	0522	25.40	3.280	24.23	1.702	0.4696	62	0.69	010.12	0
010	Total Nitrogen (25%)	0023	25.41	0.8870	24.23	1.702	0.4696	62	0.69	010.60	0
010	Total Nitrogen (25%)	0131	25.46	0.1400	24.23	1.702	0.4696	62	0.72	010.60	0
010	Total Nitrogen (25%)	0136	25.55	0.0200	24.23	1.702	0.4696	62	0.78	010.60	0
010	Total Nitrogen (25%)	0220	25.63	0.4400	24.23	1.702	0.4696	62	0.82	010.17	0
010	Total Nitrogen (25%)	0389	25.65	0.5000	24.23	1.702	0.4696	62	0.83	010.60	0
010	Total Nitrogen (25%)	0034	25.74	0.3200	24.23	1.702	0.4696	62	0.89	010.60	0
010	Total Nitrogen (25%)	0371	26.42	0.1500	24.23	1.702	0.4696	62	1.28	010.99	0
010	Total Nitrogen (25%)	0521	26.81	2.019	24.23	1.702	0.4696	62	1.52	010.60	0
010	Total Nitrogen (25%)	0506	27.65	0.1000	24.23	1.702	0.4696	62	2.01	010.99	0
010	Total Nitrogen (25%)	0482	27.75	0.3000	24.23	1.702	0.4696	62	2.07	010.60	0
010	Total Nitrogen (25%)	0483	28.50	0.1000	24.23	1.702	0.4696	62	2.51	010.60	0
010	Total Nitrogen (25%)	0420	30.23	0.3400	24.23	1.702	0.4696	62	3.53	010.60	0
010	Total Nitrogen (25%)	0524	33.68	0.3500	24.23	1.702	0.4696	62	5.55	010.99	0
010	Total Nitrogen (25%)	0117	21.30*	6.200	24.23	1.702	0.4696	62	-1.72	010.60	1
010	Total Nitrogen (25%)	0233	23.59	3.640	24.23	1.702	0.4696	62	-0.38	010.60	1
010	Total Nitrogen (25%)	0324	5.795*	0.0300	24.23	1.702	0.4696	62	-10.83	010.60	2
020	Total Phosphorus as P2O5 (%)	0324	1.260	0.2200	4.967	0.5962	0.1969	41	-6.22	020.20	0
020	Total Phosphorus as P2O5 (%)	0096	3.470	0.1600	4.967	0.5962	0.1969	41	-2.51	020.40	0
020	Total Phosphorus as P2O5 (%)	0356	3.905	0.4900	4.967	0.5962	0.1969	41	-1.78	020.20	0
020	Total Phosphorus as P2O5 (%)	0177	4.309	0.1369	4.967	0.5962	0.1969	41	-1.10	020.20	0
020	Total Phosphorus as P2O5 (%)	0035	4.360	0.5400	4.967	0.5962	0.1969	41	-1.02	020.40	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				
020	Total Phosphorus as P2O5 (%)	0292	4.360	0.0000	4.967	0.5962	0.1969	41	-1.02	020.20	0
020	Total Phosphorus as P2O5 (%)	0157	4.420	0.3600	4.967	0.5962	0.1969	41	-0.92	020.10	0
020	Total Phosphorus as P2O5 (%)	0433	4.425	0.0020	4.967	0.5962	0.1969	41	-0.91	020.50	0
020	Total Phosphorus as P2O5 (%)	0105	4.490	0.7200	4.967	0.5962	0.1969	41	-0.80	020.40	0
020	Total Phosphorus as P2O5 (%)	0105	4.510	0.7600	4.967	0.5962	0.1969	41	-0.77	020.10	0
020	Total Phosphorus as P2O5 (%)	0090	4.515	0.0100	4.967	0.5962	0.1969	41	-0.76	020.10	0
020	Total Phosphorus as P2O5 (%)	0157	4.540	0.0400	4.967	0.5962	0.1969	41	-0.72	020.50	0
020	Total Phosphorus as P2O5 (%)	0506	4.555	0.1900	4.967	0.5962	0.1969	41	-0.69	020.20	0
020	Total Phosphorus as P2O5 (%)	0456	4.595	0.0700	4.967	0.5962	0.1969	41	-0.62	020.40	0
020	Total Phosphorus as P2O5 (%)	0500	4.685	0.0300	4.967	0.5962	0.1969	41	-0.47	020.10	0
020	Total Phosphorus as P2O5 (%)	0472	4.710	0.5800	4.967	0.5962	0.1969	41	-0.43	020.50	0
020	Total Phosphorus as P2O5 (%)	0521	4.742	0.1766	4.967	0.5962	0.1969	41	-0.38	020.50	0
020	Total Phosphorus as P2O5 (%)	0234	4.950	0.1400	4.967	0.5962	0.1969	41	-0.03	020.50	0
020	Total Phosphorus as P2O5 (%)	0510	4.963	0.0030	4.967	0.5962	0.1969	41	-0.01	020.20	0
020	Total Phosphorus as P2O5 (%)	0482	4.980	0.0400	4.967	0.5962	0.1969	41	0.02	020.50	0
020	Total Phosphorus as P2O5 (%)	0389	5.040	0.2400	4.967	0.5962	0.1969	41	0.12	020.50	0
020	Total Phosphorus as P2O5 (%)	0523	5.050	0.3000	4.967	0.5962	0.1969	41	0.14	020.50	0
020	Total Phosphorus as P2O5 (%)	0481	5.085	0.2900	4.967	0.5962	0.1969	41	0.20	020.20	0
020	Total Phosphorus as P2O5 (%)	0513	5.090	0.1000	4.967	0.5962	0.1969	41	0.21	020.99	0
020	Total Phosphorus as P2O5 (%)	0211	5.120	0.0200	4.967	0.5962	0.1969	41	0.26	020.10	0
020	Total Phosphorus as P2O5 (%)	0231	5.135	0.1500	4.967	0.5962	0.1969	41	0.28	020.20	0
020	Total Phosphorus as P2O5 (%)	0309	5.215	0.0500	4.967	0.5962	0.1969	41	0.42	020.20	0
020	Total Phosphorus as P2O5 (%)	0169	5.240	0.0600	4.967	0.5962	0.1969	41	0.46	020.20	0
020	Total Phosphorus as P2O5 (%)	0416	5.260	0.0600	4.967	0.5962	0.1969	41	0.49	020.20	0
020	Total Phosphorus as P2O5 (%)	0423	5.280	0.1600	4.967	0.5962	0.1969	41	0.52	020.50	0
020	Total Phosphorus as P2O5 (%)	0300	5.315	0.2300	4.967	0.5962	0.1969	41	0.58	020.20	0
020	Total Phosphorus as P2O5 (%)	0451	5.370	0.1000	4.967	0.5962	0.1969	41	0.68	020.50	0
020	Total Phosphorus as P2O5 (%)	0487	5.400	0.0000	4.967	0.5962	0.1969	41	0.73	020.99	0
020	Total Phosphorus as P2O5 (%)	0049	5.420	0.2800	4.967	0.5962	0.1969	41	0.76	020.10	0
020	Total Phosphorus as P2O5 (%)	0483	5.575	0.2500	4.967	0.5962	0.1969	41	1.02	020.50	0
020	Total Phosphorus as P2O5 (%)	0406	5.615	0.1700	4.967	0.5962	0.1969	41	1.09	020.20	0
020	Total Phosphorus as P2O5 (%)	0444	5.725	0.0300	4.967	0.5962	0.1969	41	1.27	020.50	0
020	Total Phosphorus as P2O5 (%)	0444	5.820	0.0000	4.967	0.5962	0.1969	41	1.43	020.10	0
020	Total Phosphorus as P2O5 (%)	0457	5.855	0.3930	4.967	0.5962	0.1969	41	1.49	020.20	0
020	Total Phosphorus as P2O5 (%)	0520	6.060	0.0000	4.967	0.5962	0.1969	41	1.83	020.99	0
020	Total Phosphorus as P2O5 (%)	0402	6.520	0.5200	4.967	0.5962	0.1969	41	2.60	020.50	0
020	Total Phosphorus as P2O5 (%)	0428	4.822	1.555	4.967	0.5962	0.1969	41	-0.24	020.20	1
020	Total Phosphorus as P2O5 (%)	0522	4.975	1.550	4.967	0.5962	0.1969	41	0.01	020.20	1
020	Total Phosphorus as P2O5 (%)	0390	5.350	1.680	4.967	0.5962	0.1969	41	0.64	020.50	1
030	Citrate Insoluble Phosphorus as P2O5 (%)	0096	0.0150	0.0100				1		030.40	0
040	Indirect Available Phosphorus as P2O5 (5%)	0096	3.455*	0.1500	4.567	0.9799	0.2467	3	-1.13	040.40	0
040	Indirect Available Phosphorus as P2O5 (5%)	0072	4.940	0.3600	4.567	0.9799	0.2467	3	0.38	040.50	0
040	Indirect Available Phosphorus as P2O5 (5%)	0300	5.305	0.2300	4.567	0.9799	0.2467	3	0.75	040.20	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
041	Direct Available Phosphorus as P2O5 (5%)	0354	3.285*	0.0100	4.929	0.5275	0.2639	36	-3.12	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0007	4.200*	0.4000	4.929	0.5275	0.2639	36	-1.38	041.50	0
041	Direct Available Phosphorus as P2O5 (5%)	0325	4.220*	0.3600	4.929	0.5275	0.2639	36	-1.34	041.50	0
041	Direct Available Phosphorus as P2O5 (5%)	0230	4.350	0.5800	4.929	0.5275	0.2639	36	-1.10	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0034	4.359	0.0510	4.929	0.5275	0.2639	36	-1.08	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0037	4.370	0.0280	4.929	0.5275	0.2639	36	-1.06	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0023	4.405	0.1100	4.929	0.5275	0.2639	36	-0.99	041.51	0
041	Direct Available Phosphorus as P2O5 (5%)	0105	4.440	0.7400	4.929	0.5275	0.2639	36	-0.93	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0105	4.460	0.7000	4.929	0.5275	0.2639	36	-0.89	041.99	0
041	Direct Available Phosphorus as P2O5 (5%)	0105	4.480	0.6200	4.929	0.5275	0.2639	36	-0.85	041.11	0
041	Direct Available Phosphorus as P2O5 (5%)	0025	4.651	0.0525	4.929	0.5275	0.2639	36	-0.53	041.51	0
041	Direct Available Phosphorus as P2O5 (5%)	0136	4.750	0.1800	4.929	0.5275	0.2639	36	-0.34	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0397	4.860	0.0690	4.929	0.5275	0.2639	36	-0.13	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0043	4.860	0.3400	4.929	0.5275	0.2639	36	-0.13	041.50	0
041	Direct Available Phosphorus as P2O5 (5%)	0073	4.865	0.2300	4.929	0.5275	0.2639	36	-0.12	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0102	4.900	0.0000	4.929	0.5275	0.2639	36	-0.06	041.10	0
041	Direct Available Phosphorus as P2O5 (5%)	0072	4.905	0.3300	4.929	0.5275	0.2639	36	-0.05	041.10	0
041	Direct Available Phosphorus as P2O5 (5%)	0055	4.910	0.3200	4.929	0.5275	0.2639	36	-0.04	041.11	0
041	Direct Available Phosphorus as P2O5 (5%)	0522	4.965	1.370	4.929	0.5275	0.2639	36	0.07	041.21	0
041	Direct Available Phosphorus as P2O5 (5%)	0027	4.995	0.1340	4.929	0.5275	0.2639	36	0.12	041.20	0
041	Direct Available Phosphorus as P2O5 (5%)	0043	5.020	0.2400	4.929	0.5275	0.2639	36	0.17	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0472	5.045	0.4100	4.929	0.5275	0.2639	36	0.22	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0518	5.050	0.0600	4.929	0.5275	0.2639	36	0.23	041.99	0
041	Direct Available Phosphorus as P2O5 (5%)	0513	5.060	0.1200	4.929	0.5275	0.2639	36	0.25	041.11	0
041	Direct Available Phosphorus as P2O5 (5%)	0519	5.080	0.0800	4.929	0.5275	0.2639	36	0.29	041.99	0
041	Direct Available Phosphorus as P2O5 (5%)	0231	5.175	0.0100	4.929	0.5275	0.2639	36	0.47	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0498	5.200	0.2000	4.929	0.5275	0.2639	36	0.51	041.20	0
041	Direct Available Phosphorus as P2O5 (5%)	0423	5.230	0.1600	4.929	0.5275	0.2639	36	0.57	041.51	0
041	Direct Available Phosphorus as P2O5 (5%)	0220	5.245	0.2700	4.929	0.5275	0.2639	36	0.60	041.11	0
041	Direct Available Phosphorus as P2O5 (5%)	0291	5.245	0.0100	4.929	0.5275	0.2639	36	0.60	041.50	0
041	Direct Available Phosphorus as P2O5 (5%)	0095	5.420	0.3000	4.929	0.5275	0.2639	36	0.93	041.40	0
041	Direct Available Phosphorus as P2O5 (5%)	0131	5.750	0.6400	4.929	0.5275	0.2639	36	1.56	041.40	0
041	Direct Available Phosphorus as P2O5 (5%)	0486	5.790	0.0400	4.929	0.5275	0.2639	36	1.63	041.60	0
041	Direct Available Phosphorus as P2O5 (5%)	0452	5.860	0.0200	4.929	0.5275	0.2639	36	1.76	041.50	0
041	Direct Available Phosphorus as P2O5 (5%)	0520	5.880	0.0000	4.929	0.5275	0.2639	36	1.80	041.99	0
041	Direct Available Phosphorus as P2O5 (5%)	0086	6.965	0.3162	4.929	0.5275	0.2639	36	3.86	041.10	0
041	Direct Available Phosphorus as P2O5 (5%)	0233	4.407	1.762	4.929	0.5275	0.2639	36	-0.99	041.50	1
042	Water Soluble Orthophosphate as P2O5 (%)	0513	5.130	0.1000				1		042.99	0
048	Water Soluble Phosphorus as P2O5 (%)	0096	2.720	0.1800	4.594	1.646	0.0920	3	-1.14	048.40	0
048	Water Soluble Phosphorus as P2O5 (%)	0394	5.257	0.0660	4.594	1.646	0.0920	3	0.40	048.20	0
048	Water Soluble Phosphorus as P2O5 (%)	0444	5.805	0.0300	4.594	1.646	0.0920	3	0.74	048.50	0
050	Soluble Potassium as K2O (15%)	0420	0.5910*	0.0006	14.08	1.803	0.4876	72	-7.48	050.50	0
050	Soluble Potassium as K2O (15%)	0324	3.120*	0.0000	14.08	1.803	0.4876	72	-6.08	050.50	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 (15%)	0096	5.675*	0.1100	14.08	1.803	0.4876	72	-4.66	050.99	0
050	Soluble Potassium as K2O (15%)	0354	8.140*	0.0200	14.08	1.803	0.4876	72	-3.29	050.52	0
050	Soluble Potassium as K2O (15%)	0397	9.533*	0.9080	14.08	1.803	0.4876	72	-2.52	050.50	0
050	Soluble Potassium as K2O (15%)	0356	9.990*	2.060	14.08	1.803	0.4876	72	-2.27	050.30	0
050	Soluble Potassium as K2O (15%)	0521	10.82*	0.5869	14.08	1.803	0.4876	72	-1.81	050.99	0
050	Soluble Potassium as K2O (15%)	0292	10.86*	0.0400	14.08	1.803	0.4876	72	-1.79	050.50	0
050	Soluble Potassium as K2O (15%)	0433	11.86*	0.0170	14.08	1.803	0.4876	72	-1.23	050.99	0
050	Soluble Potassium as K2O (15%)	0007	12.00*	0.0000	14.08	1.803	0.4876	72	-1.15	050.51	0
050	Soluble Potassium as K2O (15%)	0483	12.03*	0.5500	14.08	1.803	0.4876	72	-1.14	050.51	0
050	Soluble Potassium as K2O (15%)	0023	12.39*	0.1700	14.08	1.803	0.4876	72	-0.94	050.52	0
050	Soluble Potassium as K2O (15%)	0090	12.46*	0.2800	14.08	1.803	0.4876	72	-0.90	050.00	0
050	Soluble Potassium as K2O (15%)	0177	12.52*	0.0119	14.08	1.803	0.4876	72	-0.86	050.99	0
050	Soluble Potassium as K2O (15%)	0073	12.54*	0.2800	14.08	1.803	0.4876	72	-0.85	050.00	0
050	Soluble Potassium as K2O (15%)	0105	12.62*	3.210	14.08	1.803	0.4876	72	-0.81	050.99	0
050	Soluble Potassium as K2O (15%)	0456	12.66*	0.0800	14.08	1.803	0.4876	72	-0.79	050.61	0
050	Soluble Potassium as K2O (15%)	0035	12.67*	0.8800	14.08	1.803	0.4876	72	-0.78	050.61	0
050	Soluble Potassium as K2O (15%)	0037	12.70*	0.0500	14.08	1.803	0.4876	72	-0.77	050.62	0
050	Soluble Potassium as K2O (15%)	0105	12.74*	2.900	14.08	1.803	0.4876	72	-0.74	050.62	0
050	Soluble Potassium as K2O (15%)	0157	12.85*	0.3000	14.08	1.803	0.4876	72	-0.68	050.50	0
050	Soluble Potassium as K2O (15%)	0105	12.85*	3.020	14.08	1.803	0.4876	72	-0.68	050.60	0
050	Soluble Potassium as K2O (15%)	0325	12.90*	1.000	14.08	1.803	0.4876	72	-0.65	050.99	0
050	Soluble Potassium as K2O (15%)	0309	13.39	0.1500	14.08	1.803	0.4876	72	-0.39	050.30	0
050	Soluble Potassium as K2O (15%)	0025	13.61	0.4071	14.08	1.803	0.4876	72	-0.26	050.52	0
050	Soluble Potassium as K2O (15%)	0472	13.78	0.0500	14.08	1.803	0.4876	72	-0.17	050.31	0
050	Soluble Potassium as K2O (15%)	0291	13.85	0.0400	14.08	1.803	0.4876	72	-0.13	050.51	0
050	Soluble Potassium as K2O (15%)	0055	13.91	0.1200	14.08	1.803	0.4876	72	-0.09	050.50	0
050	Soluble Potassium as K2O (15%)	0034	13.94	0.2650	14.08	1.803	0.4876	72	-0.08	050.62	0
050	Soluble Potassium as K2O (15%)	0136	14.00	0.0400	14.08	1.803	0.4876	72	-0.04	050.30	0
050	Soluble Potassium as K2O (15%)	0157	14.00	0.4000	14.08	1.803	0.4876	72	-0.04	050.30	0
050	Soluble Potassium as K2O (15%)	0482	14.10	0.0000	14.08	1.803	0.4876	72	0.01	050.99	0
050	Soluble Potassium as K2O (15%)	0043	14.23	1.260	14.08	1.803	0.4876	72	0.08	050.99	0
050	Soluble Potassium as K2O (15%)	0072	14.31	0.4500	14.08	1.803	0.4876	72	0.12	050.00	0
050	Soluble Potassium as K2O (15%)	0406	14.31	0.3600	14.08	1.803	0.4876	72	0.13	050.50	0
050	Soluble Potassium as K2O (15%)	0493	14.33	0.0500	14.08	1.803	0.4876	72	0.14	050.99	0
050	Soluble Potassium as K2O (15%)	0481	14.35	0.0900	14.08	1.803	0.4876	72	0.15	050.99	0
050	Soluble Potassium as K2O (15%)	0043	14.35	1.480	14.08	1.803	0.4876	72	0.15	050.51	0
050	Soluble Potassium as K2O (15%)	0220	14.35	0.1000	14.08	1.803	0.4876	72	0.15	050.00	0
050	Soluble Potassium as K2O (15%)	0486	14.38	0.0600	14.08	1.803	0.4876	72	0.17	050.52	0
050	Soluble Potassium as K2O (15%)	0520	14.41	0.2100	14.08	1.803	0.4876	72	0.18	050.99	0
050	Soluble Potassium as K2O (15%)	0523	14.50	0.4000	14.08	1.803	0.4876	72	0.23	050.99	0
050	Soluble Potassium as K2O (15%)	0211	14.52	0.0800	14.08	1.803	0.4876	72	0.24	050.00	0
050	Soluble Potassium as K2O (15%)	0231	14.61	0.7000	14.08	1.803	0.4876	72	0.29	050.00	0
050	Soluble Potassium as K2O (15%)	0389	14.65	0.4700	14.08	1.803	0.4876	72	0.31	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 (15%)	0487	14.65	0.3000	14.08	1.803	0.4876	72	0.32	050.99	0
050	Soluble Potassium as K2O (15%)	0519	14.89	0.0600	14.08	1.803	0.4876	72	0.45	050.61	0
050	Soluble Potassium as K2O (15%)	0055	14.93	0.0400	14.08	1.803	0.4876	72	0.47	050.00	0
050	Soluble Potassium as K2O (15%)	0169	15.05	0.0600	14.08	1.803	0.4876	72	0.54	050.60	0
050	Soluble Potassium as K2O (15%)	0518	15.08	0.0000	14.08	1.803	0.4876	72	0.55	050.99	0
050	Soluble Potassium as K2O (15%)	0452	15.12	0.0700	14.08	1.803	0.4876	72	0.57	050.51	0
050	Soluble Potassium as K2O (15%)	0510	15.12	0.0100	14.08	1.803	0.4876	72	0.58	050.60	0
050	Soluble Potassium as K2O (15%)	0423	15.14	0.0780	14.08	1.803	0.4876	72	0.59	050.52	0
050	Soluble Potassium as K2O (15%)	0394	15.28	0.0060	14.08	1.803	0.4876	72	0.66	050.99	0
050	Soluble Potassium as K2O (15%)	0498	15.35	0.3000	14.08	1.803	0.4876	72	0.70	050.31	0
050	Soluble Potassium as K2O (15%)	0230	15.40	0.4000	14.08	1.803	0.4876	72	0.73	050.50	0
050	Soluble Potassium as K2O (15%)	0513	15.42	0.0000	14.08	1.803	0.4876	72	0.74	050.99	0
050	Soluble Potassium as K2O (15%)	0500	15.43	0.0600	14.08	1.803	0.4876	72	0.75	050.99	0
050	Soluble Potassium as K2O (15%)	0416	15.52	0.0500	14.08	1.803	0.4876	72	0.80	050.00	0
050	Soluble Potassium as K2O (15%)	0451	15.55	0.4500	14.08	1.803	0.4876	72	0.81	050.99	0
050	Soluble Potassium as K2O (15%)	0131	15.57	0.6700	14.08	1.803	0.4876	72	0.82	050.61	0
050	Soluble Potassium as K2O (15%)	0234	15.58	0.2900	14.08	1.803	0.4876	72	0.83	050.99	0
050	Soluble Potassium as K2O (15%)	0095	15.71	1.480	14.08	1.803	0.4876	72	0.90	050.62	0
050	Soluble Potassium as K2O (15%)	0457	15.78	2.130	14.08	1.803	0.4876	72	0.94	050.99	0
050	Soluble Potassium as K2O (15%)	0027	15.80	0.4360	14.08	1.803	0.4876	72	0.96	050.99	0
050	Soluble Potassium as K2O (15%)	0102	16.10	0.0000	14.08	1.803	0.4876	72	1.12	050.00	0
050	Soluble Potassium as K2O (15%)	0444	17.57	0.0500	14.08	1.803	0.4876	72	1.93	050.99	0
050	Soluble Potassium as K2O (15%)	0444	17.59	0.4300	14.08	1.803	0.4876	72	1.94	050.50	0
050	Soluble Potassium as K2O (15%)	0049	18.30	0.0400	14.08	1.803	0.4876	72	2.34	050.00	0
050	Soluble Potassium as K2O (15%)	0402	18.37	0.2700	14.08	1.803	0.4876	72	2.38	050.99	0
050	Soluble Potassium as K2O (15%)	0086	18.76	3.493	14.08	1.803	0.4876	72	2.60	050.50	0
050	Soluble Potassium as K2O (15%)	0072	23.02	0.2800	14.08	1.803	0.4876	72	4.96	050.51	0
050	Soluble Potassium as K2O (15%)	0233	11.78*	5.560	14.08	1.803	0.4876	72	-1.28	050.52	1
050	Soluble Potassium as K2O (15%)	0522	13.92	5.060	14.08	1.803	0.4876	72	-0.09	050.00	1
050	Soluble Potassium as K2O (15%)	0390	19.88	8.350	14.08	1.803	0.4876	72	3.21	050.50	1
060	Water (Free) (%)	0007	0.1950	0.0300	0.7810	0.3671	0.0260	5	-1.60	060.00	0
060	Water (Free) (%)	0513	0.6850	0.0100	0.7810	0.3671	0.0260	5	-0.26	060.30	0
060	Water (Free) (%)	0510	0.8650	0.0100	0.7810	0.3671	0.0260	5	0.23	060.99	0
060	Water (Free) (%)	0513	1.065	0.0300	0.7810	0.3671	0.0260	5	0.77	060.99	0
060	Water (Free) (%)	0096	1.095	0.0500	0.7810	0.3671	0.0260	5	0.86	060.00	0
101	Acid Soluble Calcium (%)	0521	0.0096	0.0012	0.0128	0.0012	0.0018	10	-2.43	101.32	0
101	Acid Soluble Calcium (%)	0105	0.0115	0.0010	0.0128	0.0012	0.0018	10	-0.98	101.00	0
101	Acid Soluble Calcium (%)	0117	0.0118	0.0071	0.0128	0.0012	0.0018	10	-0.79	101.33	0
101	Acid Soluble Calcium (%)	0354	0.0128	0.0024	0.0128	0.0012	0.0018	10	0.01	101.30	0
101	Acid Soluble Calcium (%)	0096	0.0130	0.0000	0.0128	0.0012	0.0018	10	0.16	101.30	0
101	Acid Soluble Calcium (%)	0105	0.0130	0.0020	0.0128	0.0012	0.0018	10	0.16	101.03	0
101	Acid Soluble Calcium (%)	0086	0.0133	0.0005	0.0128	0.0012	0.0018	10	0.35	101.33	0
101	Acid Soluble Calcium (%)	0102	0.0135	0.0010	0.0128	0.0012	0.0018	10	0.54	101.30	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				
101	Acid Soluble Calcium (%)	0482	0.0135	0.0010	0.0128	0.0012	0.0018	10	0.54	101.30	0
101	Acid Soluble Calcium (%)	0035	0.0190	0.0020	0.0128	0.0012	0.0018	10	4.74	101.30	0
101	Acid Soluble Calcium (%)	0483	1.225	0.5000	0.0128	0.0012	0.0018	10	925.36	101.30	2
121	Acid Soluble Magnesium (0.1%)	0324	0.0675	0.0010	0.2700	0.0295	0.0097	41	-6.86	121.30	0
121	Acid Soluble Magnesium (0.1%)	0472	0.1100	0.0200	0.2700	0.0295	0.0097	41	-5.42	121.30	0
121	Acid Soluble Magnesium (0.1%)	0397	0.1990	0.0020	0.2700	0.0295	0.0097	41	-2.40	121.33	0
121	Acid Soluble Magnesium (0.1%)	0072	0.2200	0.0000	0.2700	0.0295	0.0097	41	-1.69	121.32	0
121	Acid Soluble Magnesium (0.1%)	0049	0.2363	0.0009	0.2700	0.0295	0.0097	41	-1.14	121.30	0
121	Acid Soluble Magnesium (0.1%)	0035	0.2375	0.0030	0.2700	0.0295	0.0097	41	-1.10	121.30	0
121	Acid Soluble Magnesium (0.1%)	0105	0.2425	0.0090	0.2700	0.0295	0.0097	41	-0.93	121.00	0
121	Acid Soluble Magnesium (0.1%)	0234	0.2450	0.0380	0.2700	0.0295	0.0097	41	-0.85	121.30	0
121	Acid Soluble Magnesium (0.1%)	0515	0.2456	0.0006	0.2700	0.0295	0.0097	41	-0.82	121.99	0
121	Acid Soluble Magnesium (0.1%)	0309	0.2500	0.0000	0.2700	0.0295	0.0097	41	-0.68	121.00	0
121	Acid Soluble Magnesium (0.1%)	0444	0.2550	0.0100	0.2700	0.0295	0.0097	41	-0.51	121.30	0
121	Acid Soluble Magnesium (0.1%)	0486	0.2550	0.0100	0.2700	0.0295	0.0097	41	-0.51	121.33	0
121	Acid Soluble Magnesium (0.1%)	0105	0.2565	0.0170	0.2700	0.0295	0.0097	41	-0.46	121.03	0
121	Acid Soluble Magnesium (0.1%)	0233	0.2568	0.0185	0.2700	0.0295	0.0097	41	-0.45	121.30	0
121	Acid Soluble Magnesium (0.1%)	0037	0.2587	0.0034	0.2700	0.0295	0.0097	41	-0.38	121.33	0
121	Acid Soluble Magnesium (0.1%)	0177	0.2597	0.0094	0.2700	0.0295	0.0097	41	-0.35	121.33	0
121	Acid Soluble Magnesium (0.1%)	0390	0.2605	0.0050	0.2700	0.0295	0.0097	41	-0.32	121.30	0
121	Acid Soluble Magnesium (0.1%)	0482	0.2650	0.0100	0.2700	0.0295	0.0097	41	-0.17	121.30	0
121	Acid Soluble Magnesium (0.1%)	0230	0.2655	0.0310	0.2700	0.0295	0.0097	41	-0.15	121.30	0
121	Acid Soluble Magnesium (0.1%)	0515	0.2686	0.0096	0.2700	0.0295	0.0097	41	-0.05	121.33	0
121	Acid Soluble Magnesium (0.1%)	0055	0.2700	0.0400	0.2700	0.0295	0.0097	41	0.00	121.30	0
121	Acid Soluble Magnesium (0.1%)	0095	0.2700	0.0200	0.2700	0.0295	0.0097	41	0.00	121.30	0
121	Acid Soluble Magnesium (0.1%)	0023	0.2710	0.0020	0.2700	0.0295	0.0097	41	0.04	121.33	0
121	Acid Soluble Magnesium (0.1%)	0291	0.2750	0.0100	0.2700	0.0295	0.0097	41	0.17	121.30	0
121	Acid Soluble Magnesium (0.1%)	0423	0.2750	0.0020	0.2700	0.0295	0.0097	41	0.17	121.32	0
121	Acid Soluble Magnesium (0.1%)	0043	0.2755	0.0050	0.2700	0.0295	0.0097	41	0.19	121.00	0
121	Acid Soluble Magnesium (0.1%)	0457	0.2810	0.0160	0.2700	0.0295	0.0097	41	0.37	121.00	0
121	Acid Soluble Magnesium (0.1%)	0389	0.2825	0.0070	0.2700	0.0295	0.0097	41	0.42	121.99	0
121	Acid Soluble Magnesium (0.1%)	0481	0.2900	0.0000	0.2700	0.0295	0.0097	41	0.68	121.00	0
121	Acid Soluble Magnesium (0.1%)	0220	0.2900	0.0000	0.2700	0.0295	0.0097	41	0.68	121.99	0
121	Acid Soluble Magnesium (0.1%)	0117	0.2924	0.0182	0.2700	0.0295	0.0097	41	0.76	121.33	0
121	Acid Soluble Magnesium (0.1%)	0433	0.2927	0.0003	0.2700	0.0295	0.0097	41	0.77	121.30	0
121	Acid Soluble Magnesium (0.1%)	0102	0.2930	0.0000	0.2700	0.0295	0.0097	41	0.78	121.30	0
121	Acid Soluble Magnesium (0.1%)	0420	0.2982	0.0026	0.2700	0.0295	0.0097	41	0.96	121.30	0
121	Acid Soluble Magnesium (0.1%)	0523	0.3000	0.0000	0.2700	0.0295	0.0097	41	1.02	121.99	0
121	Acid Soluble Magnesium (0.1%)	0524	0.3014	0.0096	0.2700	0.0295	0.0097	41	1.06	121.99	0
121	Acid Soluble Magnesium (0.1%)	0354	0.3020	0.0040	0.2700	0.0295	0.0097	41	1.09	121.30	0
121	Acid Soluble Magnesium (0.1%)	0096	0.3050	0.0100	0.2700	0.0295	0.0097	41	1.19	121.30	0
121	Acid Soluble Magnesium (0.1%)	0027	0.3235	0.0250	0.2700	0.0295	0.0097	41	1.81	121.99	0
121	Acid Soluble Magnesium (0.1%)	0231	0.3350	0.0100	0.2700	0.0295	0.0097	41	2.20	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 (0.1%)	0521	0.6212	0.0158	0.2700	0.0295	0.0097	41	11.90	121.32	0
121	Acid Soluble Magnesium (0.1%)	0086	0.2097	0.0535	0.2700	0.0295	0.0097	41	-2.04	121.33	1
121	Acid Soluble Magnesium (0.1%)	0483	0.5198	0.0605	0.2700	0.0295	0.0097	41	8.46	121.30	1
131	Water Soluble Magnesium (%)	0519	0.1900	0.0200	0.3026	0.1052	0.0140	9	-1.02	131.30	0
131	Water Soluble Magnesium (%)	0309	0.2500	0.0000	0.3026	0.1052	0.0140	9	-0.47	131.00	0
131	Water Soluble Magnesium (%)	0444	0.2600	0.0200	0.3026	0.1052	0.0140	9	-0.38	131.30	0
131	Water Soluble Magnesium (%)	0394	0.2670	0.0000	0.3026	0.1052	0.0140	9	-0.32	131.30	0
131	Water Soluble Magnesium (%)	0211	0.2690	0.0080	0.3026	0.1052	0.0140	9	-0.30	131.30	0
131	Water Soluble Magnesium (%)	0230	0.2700	0.0200	0.3026	0.1052	0.0140	9	-0.29	131.30	0
131	Water Soluble Magnesium (%)	0027	0.3020	0.0180	0.3026	0.1052	0.0140	9	-0.01	131.30	0
131	Water Soluble Magnesium (%)	0520	0.4550	0.0300	0.3026	0.1052	0.0140	9	1.37	131.70	0
131	Water Soluble Magnesium (%)	0498	0.4650	0.0100	0.3026	0.1052	0.0140	9	1.46	131.00	0
143	Elemental Sulfur (%)	0472	0.1750	0.0100	0.2089	0.0326	0.0078	4	-1.04	143.99	0
143	Elemental Sulfur (%)	0390	0.1870	0.0080	0.2089	0.0326	0.0078	4	-0.67	143.99	0
143	Elemental Sulfur (%)	0055	0.2350	0.0100	0.2089	0.0326	0.0078	4	0.80	143.00	0
143	Elemental Sulfur (%)	0389	0.2385	0.0030	0.2089	0.0326	0.0078	4	0.91	143.99	0
145	Sulfate Sulfur, HCl soluble (%)	0233	0.1625	0.0745	0.2375	0.0503	0.0329	5	-1.49	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0027	0.2300	0.0400	0.2375	0.0503	0.0329	5	-0.15	145.00	0
145	Sulfate Sulfur, HCl soluble (%)	0231	0.2300	0.0200	0.2375	0.0503	0.0329	5	-0.15	145.99	0
145	Sulfate Sulfur, HCl soluble (%)	0444	0.2700	0.0000	0.2375	0.0503	0.0329	5	0.65	145.99	0
145	Sulfate Sulfur, HCl soluble (%)	0220	0.2950	0.0300	0.2375	0.0503	0.0329	5	1.14	145.00	0
148	Total Sulfur (0.13%)	0096	0.1136	0.0291	0.2055	0.0558	0.0276	24	-1.65	148.99	0
148	Total Sulfur (0.13%)	0519	0.1200	0.0000	0.2055	0.0558	0.0276	24	-1.53	148.07	0
148	Total Sulfur (0.13%)	0354	0.1514	0.0012	0.2055	0.0558	0.0276	24	-0.97	148.99	0
148	Total Sulfur (0.13%)	0500	0.1600	0.0000	0.2055	0.0558	0.0276	24	-0.81	148.01	0
148	Total Sulfur (0.13%)	0515	0.1641	0.0266	0.2055	0.0558	0.0276	24	-0.74	148.07	0
148	Total Sulfur (0.13%)	0486	0.1650	0.0100	0.2055	0.0558	0.0276	24	-0.73	148.07	0
148	Total Sulfur (0.13%)	0105	0.1700	0.0400	0.2055	0.0558	0.0276	24	-0.64	148.01	0
148	Total Sulfur (0.13%)	0506	0.1700	0.0200	0.2055	0.0558	0.0276	24	-0.64	148.99	0
148	Total Sulfur (0.13%)	0136	0.1800	0.0400	0.2055	0.0558	0.0276	24	-0.46	148.00	0
148	Total Sulfur (0.13%)	0023	0.1890	0.0120	0.2055	0.0558	0.0276	24	-0.30	148.07	0
148	Total Sulfur (0.13%)	0177	0.1947	0.0001	0.2055	0.0558	0.0276	24	-0.19	148.07	0
148	Total Sulfur (0.13%)	0394	0.2015	0.0030	0.2055	0.0558	0.0276	24	-0.07	148.04	0
148	Total Sulfur (0.13%)	0117	0.2047	0.1438	0.2055	0.0558	0.0276	24	-0.01	148.07	0
148	Total Sulfur (0.13%)	0481	0.2100	0.0200	0.2055	0.0558	0.0276	24	0.08	148.01	0
148	Total Sulfur (0.13%)	0444	0.2250	0.0100	0.2055	0.0558	0.0276	24	0.35	148.07	0
148	Total Sulfur (0.13%)	0483	0.2273	0.0425	0.2055	0.0558	0.0276	24	0.39	148.07	0
148	Total Sulfur (0.13%)	0523	0.2300	0.0200	0.2055	0.0558	0.0276	24	0.44	148.99	0
148	Total Sulfur (0.13%)	0457	0.2328	0.0425	0.2055	0.0558	0.0276	24	0.49	148.01	0
148	Total Sulfur (0.13%)	0102	0.2340	0.0120	0.2055	0.0558	0.0276	24	0.51	148.07	0
148	Total Sulfur (0.13%)	0482	0.2350	0.0100	0.2055	0.0558	0.0276	24	0.53	148.99	0
148	Total Sulfur (0.13%)	0072	0.2800	0.0200	0.2055	0.0558	0.0276	24	1.34	148.99	0
148	Total Sulfur (0.13%)	0291	0.2850	0.0100	0.2055	0.0558	0.0276	24	1.43	148.99	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				
148	Total Sulfur (0.13%)	0086	0.3314	0.1403	0.2055	0.0558	0.0276	24	2.26	148.99	0
148	Total Sulfur (0.13%)	0520	1.085	0.0100	0.2055	0.0558	0.0276	24	15.77	148.99	0
148	Total Sulfur (0.13%)	0230	1.005	0.1900	0.2055	0.0558	0.0276	24	14.33	148.01	1
149	Sulfur - HNO3 soluble (%)	0521	0.2069	0.0062	0.2251	0.0293	0.0088	3	-0.62	149.04	0
149	Sulfur - HNO3 soluble (%)	0423	0.2095	0.0010	0.2251	0.0293	0.0088	3	-0.53	149.04	0
149	Sulfur - HNO3 soluble (%)	0524	0.2589	0.0193	0.2251	0.0293	0.0088	3	1.15	149.04	0
151	Acid Soluble Arsenic (ppm)	0519	0.0100	0.0000	0.0529	0.0500	0.0498	4	-0.77	151.30	0
151	Acid Soluble Arsenic (ppm)	0220	0.0100	0.0000	0.0529	0.0500	0.0498	4	-0.77	151.99	0
151	Acid Soluble Arsenic (ppm)	0394	0.0869	0.0115	0.0529	0.0500	0.0498	4	0.61	151.30	0
151	Acid Soluble Arsenic (ppm)	0515	0.1046	0.1875	0.0529	0.0500	0.0498	4	0.92	151.33	0
151	Acid Soluble Arsenic (ppm)	0211	0.0000	0.0000	0.0529	0.0500	0.0498	4		151.30	4
151	Acid Soluble Arsenic (ppm)	0515	0.0311	0.0621	0.0529	0.0500	0.0498	4		151.34	4
165	Acid Soluble Boron (0.025%)	0324	0.00480*	0.0002	0.0226	0.0034	0.0010	34	-5.23	165.30	0
165	Acid Soluble Boron (0.025%)	0043	0.00600*	0.0004	0.0226	0.0034	0.0010	34	-4.88	165.99	0
165	Acid Soluble Boron (0.025%)	0520	0.00935*	0.0003	0.0226	0.0034	0.0010	34	-3.89	165.99	0
165	Acid Soluble Boron (0.025%)	0397	0.01570*	0.0004	0.0226	0.0034	0.0010	34	-2.02	165.30	0
165	Acid Soluble Boron (0.025%)	0354	0.01600*	0.0008	0.0226	0.0034	0.0010	34	-1.93	165.30	0
165	Acid Soluble Boron (0.025%)	0506	0.0200	0.0000	0.0226	0.0034	0.0010	34	-0.76	165.00	0
165	Acid Soluble Boron (0.025%)	0472	0.0200	0.0000	0.0226	0.0034	0.0010	34	-0.76	165.99	0
165	Acid Soluble Boron (0.025%)	0234	0.0210	0.0020	0.0226	0.0034	0.0010	34	-0.46	165.30	0
165	Acid Soluble Boron (0.025%)	0519	0.0210	0.0020	0.0226	0.0034	0.0010	34	-0.46	165.99	0
165	Acid Soluble Boron (0.025%)	0023	0.0210	0.0000	0.0226	0.0034	0.0010	34	-0.46	165.30	0
165	Acid Soluble Boron (0.025%)	0072	0.0210	0.0000	0.0226	0.0034	0.0010	34	-0.46	165.30	0
165	Acid Soluble Boron (0.025%)	0433	0.0212	0.0002	0.0226	0.0034	0.0010	34	-0.40	165.30	0
165	Acid Soluble Boron (0.025%)	0515	0.0213	0.0001	0.0226	0.0034	0.0010	34	-0.39	165.99	0
165	Acid Soluble Boron (0.025%)	0055	0.0215	0.0010	0.0226	0.0034	0.0010	34	-0.32	165.00	0
165	Acid Soluble Boron (0.025%)	0523	0.0215	0.0010	0.0226	0.0034	0.0010	34	-0.32	165.99	0
165	Acid Soluble Boron (0.025%)	0090	0.0225	0.0010	0.0226	0.0034	0.0010	34	-0.02	165.30	0
165	Acid Soluble Boron (0.025%)	0457	0.0226	0.0013	0.0226	0.0034	0.0010	34	-0.01	165.99	0
165	Acid Soluble Boron (0.025%)	0423	0.0235	0.0010	0.0226	0.0034	0.0010	34	0.27	165.99	0
165	Acid Soluble Boron (0.025%)	0230	0.0236	0.0015	0.0226	0.0034	0.0010	34	0.29	165.99	0
165	Acid Soluble Boron (0.025%)	0394	0.0236	0.0010	0.0226	0.0034	0.0010	34	0.30	165.30	0
165	Acid Soluble Boron (0.025%)	0095	0.0238	0.0011	0.0226	0.0034	0.0010	34	0.35	165.99	0
165	Acid Soluble Boron (0.025%)	0483	0.0238	0.0040	0.0226	0.0034	0.0010	34	0.36	165.99	0
165	Acid Soluble Boron (0.025%)	0086	0.0240	0.0009	0.0226	0.0034	0.0010	34	0.41	165.99	0
165	Acid Soluble Boron (0.025%)	0389	0.0241	0.0007	0.0226	0.0034	0.0010	34	0.44	165.30	0
165	Acid Soluble Boron (0.025%)	0220	0.0245	0.0010	0.0226	0.0034	0.0010	34	0.57	165.99	0
165	Acid Soluble Boron (0.025%)	0486	0.0245	0.0010	0.0226	0.0034	0.0010	34	0.57	165.99	0
165	Acid Soluble Boron (0.025%)	0220	0.0250	0.0000	0.0226	0.0034	0.0010	34	0.71	165.00	0
165	Acid Soluble Boron (0.025%)	0444	0.0250	0.0020	0.0226	0.0034	0.0010	34	0.71	165.30	0
165	Acid Soluble Boron (0.025%)	0231	0.0255	0.0030	0.0226	0.0034	0.0010	34	0.86	165.99	0
165	Acid Soluble Boron (0.025%)	0500	0.0260	0.0000	0.0226	0.0034	0.0010	34	1.01	165.99	0
165	Acid Soluble Boron (0.025%)	0482	0.0260	0.0040	0.0226	0.0034	0.0010	34	1.01	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 (0.025%)	0481	0.0275	0.0010	0.0226	0.0034	0.0010	34	1.45	165.00	0
165	Acid Soluble Boron (0.025%)	0524	0.0294	0.0001	0.0226	0.0034	0.0010	34	1.99	165.99	0
165	Acid Soluble Boron (0.025%)	0521	0.0458	0.0013	0.0226	0.0034	0.0010	34	6.82	165.99	0
165	Acid Soluble Boron (0.025%)	0117	0.0196	0.0131	0.0226	0.0034	0.0010	34	-0.89	165.99	1
171	Water Soluble Boron (%)	0444	0.0265	0.0030	0.0287	0.0019	0.0013	3	-1.14	171.99	0
171	Water Soluble Boron (%)	0027	0.0295	0.0010	0.0287	0.0019	0.0013	3	0.44	171.99	0
171	Water Soluble Boron (%)	0402	0.0300	0.0000	0.0287	0.0019	0.0013	3	0.70	171.99	0
181	Acid Soluble Cadmium (ppm)	0519	0.0100	0.0000	0.0463	0.0381	0.0090	5	-0.87	181.30	0
181	Acid Soluble Cadmium (ppm)	0523	0.0135	0.0010	0.0463	0.0381	0.0090	5	-0.79	181.30	0
181	Acid Soluble Cadmium (ppm)	0394	0.0350	0.0020	0.0463	0.0381	0.0090	5	-0.27	181.30	0
181	Acid Soluble Cadmium (ppm)	0524	0.0832	0.0218	0.0463	0.0381	0.0090	5	0.88	181.30	0
181	Acid Soluble Cadmium (ppm)	0220	0.0900	0.0200	0.0463	0.0381	0.0090	5	1.05	181.99	0
181	Acid Soluble Cadmium (ppm)	0515	1.624	0.6300	0.0463	0.0381	0.0090	5	37.85	181.33	1
181	Acid Soluble Cadmium (ppm)	0515	0.0000	0.0000	0.0463	0.0381	0.0090	5		181.34	4
191	Acid Soluble Chromium (ppm)	0086	0.4927	0.0435	1.088	0.8486	0.2450	9	-0.67	191.33	0
191	Acid Soluble Chromium (ppm)	0519	0.4950	0.0300	1.088	0.8486	0.2450	9	-0.66	191.30	0
191	Acid Soluble Chromium (ppm)	0102	0.5595	0.0070	1.088	0.8486	0.2450	9	-0.59	191.30	0
191	Acid Soluble Chromium (ppm)	0444	0.7100	0.0600	1.088	0.8486	0.2450	9	-0.42	191.30	0
191	Acid Soluble Chromium (ppm)	0515	0.7199	0.8462	1.088	0.8486	0.2450	9	-0.41	191.34	0
191	Acid Soluble Chromium (ppm)	0389	1.050	0.1000	1.088	0.8486	0.2450	9	-0.04	191.30	0
191	Acid Soluble Chromium (ppm)	0515	1.057	0.5380	1.088	0.8486	0.2450	9	-0.04	191.33	0
191	Acid Soluble Chromium (ppm)	0220	2.350	0.5000	1.088	0.8486	0.2450	9	1.41	191.99	0
191	Acid Soluble Chromium (ppm)	0035	2.470	0.0800	1.088	0.8486	0.2450	9	1.54	191.30	0
202	Acid Soluble Cobalt (ppm)	0096	6.850	0.2400	15.04	2.952	0.4880	15	-2.77	202.30	0
202	Acid Soluble Cobalt (ppm)	0523	9.875	0.4500	15.04	2.952	0.4880	15	-1.75	202.30	0
202	Acid Soluble Cobalt (ppm)	0035	12.40	0.8000	15.04	2.952	0.4880	15	-0.89	202.30	0
202	Acid Soluble Cobalt (ppm)	0482	12.45	0.1000	15.04	2.952	0.4880	15	-0.88	202.30	0
202	Acid Soluble Cobalt (ppm)	0515	14.58	0.1460	15.04	2.952	0.4880	15	-0.16	202.34	0
202	Acid Soluble Cobalt (ppm)	0037	15.28	0.0920	15.04	2.952	0.4880	15	0.08	202.33	0
202	Acid Soluble Cobalt (ppm)	0389	15.30	0.2000	15.04	2.952	0.4880	15	0.09	202.30	0
202	Acid Soluble Cobalt (ppm)	0230	15.30	2.800	15.04	2.952	0.4880	15	0.09	202.34	0
202	Acid Soluble Cobalt (ppm)	0423	15.50	0.2000	15.04	2.952	0.4880	15	0.16	202.32	0
202	Acid Soluble Cobalt (ppm)	0515	15.76	1.348	15.04	2.952	0.4880	15	0.24	202.33	0
202	Acid Soluble Cobalt (ppm)	0102	15.83	0.1910	15.04	2.952	0.4880	15	0.27	202.30	0
202	Acid Soluble Cobalt (ppm)	0220	16.40	0.2000	15.04	2.952	0.4880	15	0.46	202.99	0
202	Acid Soluble Cobalt (ppm)	0524	17.52	0.0327	15.04	2.952	0.4880	15	0.84	202.30	0
202	Acid Soluble Cobalt (ppm)	0086	18.59	0.5100	15.04	2.952	0.4880	15	1.20	202.33	0
202	Acid Soluble Cobalt (ppm)	0520	35.39	0.0100	15.04	2.952	0.4880	15	6.89	202.30	0
202	Acid Soluble Cobalt (ppm)	0117	14.24	9.142	15.04	2.952	0.4880	15	-0.27	202.33	1
221	Acid Soluble Copper (0.0125%)	0324	0.00265*	0.0005	0.0120	0.0019	0.0008	44	-4.79	221.30	0
221	Acid Soluble Copper (0.0125%)	0096	0.00345*	0.0001	0.0120	0.0019	0.0008	44	-4.38	221.30	0
221	Acid Soluble Copper (0.0125%)	0354	0.0080	0.0000	0.0120	0.0019	0.0008	44	-2.04	221.30	0
221	Acid Soluble Copper (0.0125%)	0397	0.0087	0.0000	0.0120	0.0019	0.0008	44	-1.68	221.03	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 (0.0125%)	0291	0.0100	0.0000	0.0120	0.0019	0.0008	44	-1.01	221.30	0
221	Acid Soluble Copper (0.0125%)	0472	0.0100	0.0000	0.0120	0.0019	0.0008	44	-1.01	221.30	0
221	Acid Soluble Copper (0.0125%)	0519	0.0100	0.0000	0.0120	0.0019	0.0008	44	-1.01	221.30	0
221	Acid Soluble Copper (0.0125%)	0506	0.0100	0.0000	0.0120	0.0019	0.0008	44	-1.01	221.99	0
221	Acid Soluble Copper (0.0125%)	0035	0.0104	0.0003	0.0120	0.0019	0.0008	44	-0.83	221.30	0
221	Acid Soluble Copper (0.0125%)	0090	0.0105	0.0010	0.0120	0.0019	0.0008	44	-0.75	221.30	0
221	Acid Soluble Copper (0.0125%)	0500	0.0108	0.0004	0.0120	0.0019	0.0008	44	-0.60	221.00	0
221	Acid Soluble Copper (0.0125%)	0230	0.0108	0.0004	0.0120	0.0019	0.0008	44	-0.60	221.30	0
221	Acid Soluble Copper (0.0125%)	0023	0.0110	0.0000	0.0120	0.0019	0.0008	44	-0.50	221.03	0
221	Acid Soluble Copper (0.0125%)	0433	0.0111	0.0002	0.0120	0.0019	0.0008	44	-0.44	221.30	0
221	Acid Soluble Copper (0.0125%)	0233	0.0112	0.0042	0.0120	0.0019	0.0008	44	-0.39	221.30	0
221	Acid Soluble Copper (0.0125%)	0037	0.0114	0.0001	0.0120	0.0019	0.0008	44	-0.32	221.33	0
221	Acid Soluble Copper (0.0125%)	0390	0.0115	0.0007	0.0120	0.0019	0.0008	44	-0.26	221.30	0
221	Acid Soluble Copper (0.0125%)	0483	0.0115	0.0026	0.0120	0.0019	0.0008	44	-0.24	221.30	0
221	Acid Soluble Copper (0.0125%)	0515	0.0116	0.0009	0.0120	0.0019	0.0008	44	-0.21	221.99	0
221	Acid Soluble Copper (0.0125%)	0055	0.0117	0.0008	0.0120	0.0019	0.0008	44	-0.14	221.30	0
221	Acid Soluble Copper (0.0125%)	0515	0.0117	0.0004	0.0120	0.0019	0.0008	44	-0.14	221.33	0
221	Acid Soluble Copper (0.0125%)	0105	0.0119	0.0044	0.0120	0.0019	0.0008	44	-0.03	221.00	0
221	Acid Soluble Copper (0.0125%)	0105	0.0120	0.0040	0.0120	0.0019	0.0008	44	0.02	221.03	0
221	Acid Soluble Copper (0.0125%)	0234	0.0120	0.0020	0.0120	0.0019	0.0008	44	0.02	221.30	0
221	Acid Soluble Copper (0.0125%)	0523	0.0120	0.0020	0.0120	0.0019	0.0008	44	0.02	221.99	0
221	Acid Soluble Copper (0.0125%)	0389	0.0122	0.0007	0.0120	0.0019	0.0008	44	0.10	221.99	0
221	Acid Soluble Copper (0.0125%)	0095	0.0122	0.0012	0.0120	0.0019	0.0008	44	0.12	221.30	0
221	Acid Soluble Copper (0.0125%)	0220	0.0123	0.0002	0.0120	0.0019	0.0008	44	0.17	221.99	0
221	Acid Soluble Copper (0.0125%)	0521	0.0124	0.0006	0.0120	0.0019	0.0008	44	0.22	221.32	0
221	Acid Soluble Copper (0.0125%)	0486	0.0128	0.0001	0.0120	0.0019	0.0008	44	0.40	221.33	0
221	Acid Soluble Copper (0.0125%)	0457	0.0128	0.0004	0.0120	0.0019	0.0008	44	0.43	221.00	0
221	Acid Soluble Copper (0.0125%)	0043	0.0129	0.0001	0.0120	0.0019	0.0008	44	0.46	221.00	0
221	Acid Soluble Copper (0.0125%)	0102	0.0130	0.0000	0.0120	0.0019	0.0008	44	0.53	221.30	0
221	Acid Soluble Copper (0.0125%)	0482	0.0130	0.0000	0.0120	0.0019	0.0008	44	0.53	221.30	0
221	Acid Soluble Copper (0.0125%)	0394	0.0132	0.0003	0.0120	0.0019	0.0008	44	0.61	221.32	0
221	Acid Soluble Copper (0.0125%)	0231	0.0140	0.0020	0.0120	0.0019	0.0008	44	1.05	221.30	0
221	Acid Soluble Copper (0.0125%)	0481	0.0140	0.0000	0.0120	0.0019	0.0008	44	1.05	221.00	0
221	Acid Soluble Copper (0.0125%)	0049	0.0144	0.0006	0.0120	0.0019	0.0008	44	1.25	221.30	0
221	Acid Soluble Copper (0.0125%)	0498	0.0145	0.0010	0.0120	0.0019	0.0008	44	1.30	221.00	0
221	Acid Soluble Copper (0.0125%)	0423	0.0146	0.0001	0.0120	0.0019	0.0008	44	1.33	221.32	0
221	Acid Soluble Copper (0.0125%)	0524	0.0147	0.0009	0.0120	0.0019	0.0008	44	1.38	221.99	0
221	Acid Soluble Copper (0.0125%)	0444	0.0155	0.0010	0.0120	0.0019	0.0008	44	1.82	221.30	0
221	Acid Soluble Copper (0.0125%)	0027	0.0160	0.0000	0.0120	0.0019	0.0008	44	2.08	221.99	0
221	Acid Soluble Copper (0.0125%)	0520	0.0224	0.0002	0.0120	0.0019	0.0008	44	5.37	221.30	0
221	Acid Soluble Copper (0.0125%)	0117	0.0112	0.0099	0.0120	0.0019	0.0008	44	-0.42	221.33	1
221	Acid Soluble Copper (0.0125%)	0402	0.0150	0.0100	0.0120	0.0019	0.0008	44	1.56	221.30	1
221	Acid Soluble Copper (0.0125%)	0086	0.1334	0.0081	0.0120	0.0019	0.0008	44	62.42	221.33	2

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 (0.125%)	0324	0.00260*	0.0002	0.1118	0.0218	0.0076	45	-5.02	241.30	0
241	Acid Soluble Iron (0.125%)	0519	0.01500*	0.0100	0.1118	0.0218	0.0076	45	-4.45	241.30	0
241	Acid Soluble Iron (0.125%)	0096	0.03500*	0.0100	0.1118	0.0218	0.0076	45	-3.53	241.30	0
241	Acid Soluble Iron (0.125%)	0354	0.07000*	0.0040	0.1118	0.0218	0.0076	45	-1.92	241.30	0
241	Acid Soluble Iron (0.125%)	0483	0.07225*	0.0155	0.1118	0.0218	0.0076	45	-1.82	241.30	0
241	Acid Soluble Iron (0.125%)	0506	0.07500*	0.0100	0.1118	0.0218	0.0076	45	-1.69	241.99	0
241	Acid Soluble Iron (0.125%)	0397	0.08315*	0.0001	0.1118	0.0218	0.0076	45	-1.32	241.33	0
241	Acid Soluble Iron (0.125%)	0023	0.09200*	0.0040	0.1118	0.0218	0.0076	45	-0.91	241.33	0
241	Acid Soluble Iron (0.125%)	0521	0.09395*	0.0029	0.1118	0.0218	0.0076	45	-0.82	241.32	0
241	Acid Soluble Iron (0.125%)	0433	0.0983	0.0010	0.1118	0.0218	0.0076	45	-0.62	241.30	0
241	Acid Soluble Iron (0.125%)	0233	0.1008	0.0441	0.1118	0.0218	0.0076	45	-0.51	241.30	0
241	Acid Soluble Iron (0.125%)	0177	0.1018	0.0027	0.1118	0.0218	0.0076	45	-0.46	241.33	0
241	Acid Soluble Iron (0.125%)	0035	0.1025	0.0070	0.1118	0.0218	0.0076	45	-0.43	241.30	0
241	Acid Soluble Iron (0.125%)	0481	0.1050	0.0100	0.1118	0.0218	0.0076	45	-0.31	241.00	0
241	Acid Soluble Iron (0.125%)	0230	0.1060	0.0000	0.1118	0.0218	0.0076	45	-0.27	241.30	0
241	Acid Soluble Iron (0.125%)	0037	0.1068	0.0007	0.1118	0.0218	0.0076	45	-0.23	241.33	0
241	Acid Soluble Iron (0.125%)	0515	0.1080	0.0191	0.1118	0.0218	0.0076	45	-0.18	241.33	0
241	Acid Soluble Iron (0.125%)	0105	0.1085	0.0270	0.1118	0.0218	0.0076	45	-0.15	241.00	0
241	Acid Soluble Iron (0.125%)	0390	0.1085	0.0050	0.1118	0.0218	0.0076	45	-0.15	241.30	0
241	Acid Soluble Iron (0.125%)	0090	0.1095	0.0030	0.1118	0.0218	0.0076	45	-0.11	241.30	0
241	Acid Soluble Iron (0.125%)	0105	0.1100	0.0340	0.1118	0.0218	0.0076	45	-0.08	241.03	0
241	Acid Soluble Iron (0.125%)	0095	0.1114	0.0010	0.1118	0.0218	0.0076	45	-0.02	241.30	0
241	Acid Soluble Iron (0.125%)	0515	0.1129	0.0088	0.1118	0.0218	0.0076	45	0.05	241.99	0
241	Acid Soluble Iron (0.125%)	0523	0.1135	0.0050	0.1118	0.0218	0.0076	45	0.08	241.99	0
241	Acid Soluble Iron (0.125%)	0102	0.1140	0.0080	0.1118	0.0218	0.0076	45	0.10	241.30	0
241	Acid Soluble Iron (0.125%)	0043	0.1165	0.0130	0.1118	0.0218	0.0076	45	0.21	241.00	0
241	Acid Soluble Iron (0.125%)	0055	0.1175	0.0049	0.1118	0.0218	0.0076	45	0.26	241.30	0
241	Acid Soluble Iron (0.125%)	0423	0.1175	0.0010	0.1118	0.0218	0.0076	45	0.26	241.32	0
241	Acid Soluble Iron (0.125%)	0394	0.1179	0.0095	0.1118	0.0218	0.0076	45	0.28	241.32	0
241	Acid Soluble Iron (0.125%)	0291	0.1200	0.0000	0.1118	0.0218	0.0076	45	0.38	241.30	0
241	Acid Soluble Iron (0.125%)	0482	0.1200	0.0000	0.1118	0.0218	0.0076	45	0.38	241.30	0
241	Acid Soluble Iron (0.125%)	0220	0.1200	0.0000	0.1118	0.0218	0.0076	45	0.38	241.99	0
241	Acid Soluble Iron (0.125%)	0444	0.1220	0.0040	0.1118	0.0218	0.0076	45	0.47	241.30	0
241	Acid Soluble Iron (0.125%)	0231	0.1235	0.0010	0.1118	0.0218	0.0076	45	0.54	241.30	0
241	Acid Soluble Iron (0.125%)	0234	0.1240	0.0020	0.1118	0.0218	0.0076	45	0.56	241.30	0
241	Acid Soluble Iron (0.125%)	0472	0.1250	0.0300	0.1118	0.0218	0.0076	45	0.61	241.30	0
241	Acid Soluble Iron (0.125%)	0049	0.1304	0.0002	0.1118	0.0218	0.0076	45	0.85	241.30	0
241	Acid Soluble Iron (0.125%)	0500	0.1310	0.0020	0.1118	0.0218	0.0076	45	0.88	241.00	0
241	Acid Soluble Iron (0.125%)	0457	0.1311	0.0191	0.1118	0.0218	0.0076	45	0.88	241.00	0
241	Acid Soluble Iron (0.125%)	0524	0.1380	0.0030	0.1118	0.0218	0.0076	45	1.20	241.99	0
241	Acid Soluble Iron (0.125%)	0486	0.1385	0.0010	0.1118	0.0218	0.0076	45	1.23	241.33	0
241	Acid Soluble Iron (0.125%)	0027	0.1480	0.0140	0.1118	0.0218	0.0076	45	1.66	241.99	0
241	Acid Soluble Iron (0.125%)	0389	0.1520	0.0040	0.1118	0.0218	0.0076	45	1.85	241.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
241	Acid Soluble Iron (0.125%)	0402	0.1600	0.0000	0.1118	0.0218	0.0076	45	2.21	241.30	0
241	Acid Soluble Iron (0.125%)	0520	0.1884	0.0004	0.1118	0.0218	0.0076	45	3.52	241.30	0
241	Acid Soluble Iron (0.125%)	0117	0.1047	0.0805	0.1118	0.0218	0.0076	45	-0.33	241.33	1
251	Acid Soluble Lead (ppm)	0220	0.0100	0.0000	0.2982	0.2881	0.1219	5	-0.91	251.99	0
251	Acid Soluble Lead (ppm)	0519	0.2000	0.0200	0.2982	0.2881	0.1219	5	-0.31	251.30	0
251	Acid Soluble Lead (ppm)	0394	0.2060	0.0420	0.2982	0.2881	0.1219	5	-0.29	251.30	0
251	Acid Soluble Lead (ppm)	0524	0.2961	0.0226	0.2982	0.2881	0.1219	5	-0.01	251.30	0
251	Acid Soluble Lead (ppm)	0515	0.7787	0.5247	0.2982	0.2881	0.1219	5	1.52	251.33	0
251	Acid Soluble Lead (ppm)	0211	0.0000	0.0000	0.2982	0.2881	0.1219	5		251.30	4
251	Acid Soluble Lead (ppm)	0515	0.0000	0.0000	0.2982	0.2881	0.1219	5		251.34	4
261	Acid Soluble Manganese (0.063%)	0324	0.00120*	0.0000	0.0529	0.0096	0.0038	46	-5.37	261.31	0
261	Acid Soluble Manganese (0.063%)	0520	0.01120*	0.0002	0.0529	0.0096	0.0038	46	-4.33	261.34	0
261	Acid Soluble Manganese (0.063%)	0420	0.01145*	0.0003	0.0529	0.0096	0.0038	46	-4.30	261.30	0
261	Acid Soluble Manganese (0.063%)	0096	0.01665*	0.0001	0.0529	0.0096	0.0038	46	-3.76	261.30	0
261	Acid Soluble Manganese (0.063%)	0506	0.03000*	0.0000	0.0529	0.0096	0.0038	46	-2.38	261.99	0
261	Acid Soluble Manganese (0.063%)	0354	0.03200*	0.0000	0.0529	0.0096	0.0038	46	-2.17	261.30	0
261	Acid Soluble Manganese (0.063%)	0397	0.04095*	0.0001	0.0529	0.0096	0.0038	46	-1.24	261.35	0
261	Acid Soluble Manganese (0.063%)	0483	0.04200*	0.0032	0.0529	0.0096	0.0038	46	-1.13	261.32	0
261	Acid Soluble Manganese (0.063%)	0035	0.0441	0.0019	0.0529	0.0096	0.0038	46	-0.92	261.30	0
261	Acid Soluble Manganese (0.063%)	0072	0.0450	0.0000	0.0529	0.0096	0.0038	46	-0.82	261.31	0
261	Acid Soluble Manganese (0.063%)	0230	0.0483	0.0046	0.0529	0.0096	0.0038	46	-0.48	261.31	0
261	Acid Soluble Manganese (0.063%)	0055	0.0490	0.0032	0.0529	0.0096	0.0038	46	-0.40	261.32	0
261	Acid Soluble Manganese (0.063%)	0117	0.0494	0.0376	0.0529	0.0096	0.0038	46	-0.36	261.35	0
261	Acid Soluble Manganese (0.063%)	0234	0.0495	0.0030	0.0529	0.0096	0.0038	46	-0.35	261.31	0
261	Acid Soluble Manganese (0.063%)	0291	0.0500	0.0000	0.0529	0.0096	0.0038	46	-0.30	261.30	0
261	Acid Soluble Manganese (0.063%)	0433	0.0509	0.0003	0.0529	0.0096	0.0038	46	-0.21	261.30	0
261	Acid Soluble Manganese (0.063%)	0515	0.0512	0.0173	0.0529	0.0096	0.0038	46	-0.18	261.35	0
261	Acid Soluble Manganese (0.063%)	0023	0.0515	0.0010	0.0529	0.0096	0.0038	46	-0.14	261.35	0
261	Acid Soluble Manganese (0.063%)	0037	0.0516	0.0002	0.0529	0.0096	0.0038	46	-0.13	261.35	0
261	Acid Soluble Manganese (0.063%)	0105	0.0520	0.0160	0.0529	0.0096	0.0038	46	-0.09	261.12	0
261	Acid Soluble Manganese (0.063%)	0220	0.0525	0.0010	0.0529	0.0096	0.0038	46	-0.04	261.99	0
261	Acid Soluble Manganese (0.063%)	0095	0.0530	0.0031	0.0529	0.0096	0.0038	46	0.01	261.99	0
261	Acid Soluble Manganese (0.063%)	0515	0.0530	0.0011	0.0529	0.0096	0.0038	46	0.01	261.99	0
261	Acid Soluble Manganese (0.063%)	0090	0.0530	0.0020	0.0529	0.0096	0.0038	46	0.01	261.30	0
261	Acid Soluble Manganese (0.063%)	0105	0.0535	0.0170	0.0529	0.0096	0.0038	46	0.06	261.15	0
261	Acid Soluble Manganese (0.063%)	0523	0.0535	0.0030	0.0529	0.0096	0.0038	46	0.06	261.99	0
261	Acid Soluble Manganese (0.063%)	0390	0.0536	0.0044	0.0529	0.0096	0.0038	46	0.07	261.30	0
261	Acid Soluble Manganese (0.063%)	0102	0.0540	0.0020	0.0529	0.0096	0.0038	46	0.12	261.30	0
261	Acid Soluble Manganese (0.063%)	0394	0.0545	0.0010	0.0529	0.0096	0.0038	46	0.17	261.34	0
261	Acid Soluble Manganese (0.063%)	0472	0.0550	0.0100	0.0529	0.0096	0.0038	46	0.22	261.30	0
261	Acid Soluble Manganese (0.063%)	0519	0.0555	0.0030	0.0529	0.0096	0.0038	46	0.27	261.32	0
261	Acid Soluble Manganese (0.063%)	0481	0.0575	0.0010	0.0529	0.0096	0.0038	46	0.48	261.99	0
261	Acid Soluble Manganese (0.063%)	0231	0.0580	0.0040	0.0529	0.0096	0.0038	46	0.53	261.32	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				
261	Acid Soluble Manganese (0.063%)	0444	0.0580	0.0000	0.0529	0.0096	0.0038	46	0.53	261.32	0
261	Acid Soluble Manganese (0.063%)	0482	0.0600	0.0000	0.0529	0.0096	0.0038	46	0.74	261.31	0
261	Acid Soluble Manganese (0.063%)	0423	0.0605	0.0010	0.0529	0.0096	0.0038	46	0.79	261.34	0
261	Acid Soluble Manganese (0.063%)	0521	0.0619	0.0018	0.0529	0.0096	0.0038	46	0.94	261.34	0
261	Acid Soluble Manganese (0.063%)	0486	0.0620	0.0000	0.0529	0.0096	0.0038	46	0.95	261.35	0
261	Acid Soluble Manganese (0.063%)	0500	0.0630	0.0000	0.0529	0.0096	0.0038	46	1.05	261.12	0
261	Acid Soluble Manganese (0.063%)	0027	0.0630	0.0060	0.0529	0.0096	0.0038	46	1.05	261.99	0
261	Acid Soluble Manganese (0.063%)	0457	0.0631	0.0039	0.0529	0.0096	0.0038	46	1.06	261.12	0
261	Acid Soluble Manganese (0.063%)	0086	0.0631	0.0006	0.0529	0.0096	0.0038	46	1.06	261.33	0
261	Acid Soluble Manganese (0.063%)	0402	0.0650	0.0100	0.0529	0.0096	0.0038	46	1.26	261.32	0
261	Acid Soluble Manganese (0.063%)	0524	0.0660	0.0014	0.0529	0.0096	0.0038	46	1.36	261.99	0
261	Acid Soluble Manganese (0.063%)	0389	0.0720	0.0039	0.0529	0.0096	0.0038	46	1.98	261.99	0
261	Acid Soluble Manganese (0.063%)	0498	0.0735	0.0050	0.0529	0.0096	0.0038	46	2.14	261.11	0
261	Acid Soluble Manganese (0.063%)	0233	0.1610	0.2101	0.0529	0.0096	0.0038	46	11.22	261.30	1
271	Water Soluble Manganese (%)	0211	0.0490	0.0020	0.0597	0.0099	0.0027	3	-1.08	271.30	0
271	Water Soluble Manganese (%)	0444	0.0615	0.0030	0.0597	0.0099	0.0027	3	0.19	271.30	0
271	Water Soluble Manganese (%)	0027	0.0685	0.0030	0.0597	0.0099	0.0027	3	0.89	271.99	0
281	Acid Soluble Mercury (ppm)	0394	0.0026	0.0001				2		281.30	0
281	Acid Soluble Mercury (ppm)	0519	0.0100	0.0000				2		281.30	0
281	Acid Soluble Mercury (ppm)	0515	0.0000	0.0000				2		281.30	4
289	Acid Soluble Molybdenum (125ppm)	0394	0.01185*	0.0005	107.8	23.02	5.909	26	-4.69	289.32	0
289	Acid Soluble Molybdenum (125ppm)	0096	34.00*	0.2000	107.8	23.02	5.909	26	-3.21	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0035	76.95	0.1000	107.8	23.02	5.909	26	-1.34	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0397	83.13	2.900	107.8	23.02	5.909	26	-1.07	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0433	84.02	0.3178	107.8	23.02	5.909	26	-1.04	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0521	87.24	1.309	107.8	23.02	5.909	26	-0.90	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0234	93.00	10.00	107.8	23.02	5.909	26	-0.64	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0233	93.55	41.90	107.8	23.02	5.909	26	-0.62	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0095	106.0	4.000	107.8	23.02	5.909	26	-0.08	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0515	106.3	10.07	107.8	23.02	5.909	26	-0.07	289.34	0
289	Acid Soluble Molybdenum (125ppm)	0037	106.4	0.8600	107.8	23.02	5.909	26	-0.06	289.33	0
289	Acid Soluble Molybdenum (125ppm)	0515	108.1	12.69	107.8	23.02	5.909	26	0.01	289.33	0
289	Acid Soluble Molybdenum (125ppm)	0102	109.8	4.280	107.8	23.02	5.909	26	0.09	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0500	110.0	0.0000	107.8	23.02	5.909	26	0.09	289.00	0
289	Acid Soluble Molybdenum (125ppm)	0423	111.7	3.220	107.8	23.02	5.909	26	0.17	289.33	0
289	Acid Soluble Molybdenum (125ppm)	0523	112.2	1.300	107.8	23.02	5.909	26	0.19	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0220	113.0	6.000	107.8	23.02	5.909	26	0.22	289.99	0
289	Acid Soluble Molybdenum (125ppm)	0486	113.5	1.000	107.8	23.02	5.909	26	0.25	289.33	0
289	Acid Soluble Molybdenum (125ppm)	0519	115.0	2.000	107.8	23.02	5.909	26	0.31	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0086	121.5	12.22	107.8	23.02	5.909	26	0.60	289.33	0
289	Acid Soluble Molybdenum (125ppm)	0027	124.6	4.376	107.8	23.02	5.909	26	0.73	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0444	125.0	10.00	107.8	23.02	5.909	26	0.75	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0049	130.0	4.030	107.8	23.02	5.909	26	0.96	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 (125ppm)	0524	141.5	10.06	107.8	23.02	5.909	26	1.46	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0520	184.7	0.0100	107.8	23.02	5.909	26	3.34	289.30	0
289	Acid Soluble Molybdenum (125ppm)	0481	187.8	10.80	107.8	23.02	5.909	26	3.47	289.99	0
289	Acid Soluble Molybdenum (125ppm)	0117	94.77	91.47	107.8	23.02	5.909	26	-0.57	289.33	1
291	Acid Soluble Nickel (ppm)	0394	0.1350	0.0800	0.3525	0.1554	0.2240	6	-1.30	291.30	0
291	Acid Soluble Nickel (ppm)	0519	0.3100	0.0200	0.3525	0.1554	0.2240	6	-0.25	291.30	0
291	Acid Soluble Nickel (ppm)	0086	0.3427	0.0056	0.3525	0.1554	0.2240	6	-0.06	291.33	0
291	Acid Soluble Nickel (ppm)	0515	0.3497	0.5120	0.3525	0.1554	0.2240	6	-0.02	291.33	0
291	Acid Soluble Nickel (ppm)	0524	0.4277	0.0262	0.3525	0.1554	0.2240	6	0.45	291.30	0
291	Acid Soluble Nickel (ppm)	0220	0.5500	0.7000	0.3525	0.1554	0.2240	6	1.18	291.99	0
291	Acid Soluble Nickel (ppm)	0521	0.0000	0.0000	0.3525	0.1554	0.2240	6		291.30	4
291	Acid Soluble Nickel (ppm)	0515	0.1802	0.3604	0.3525	0.1554	0.2240	6		291.34	4
301	Acid Soluble Selenium (ppm)	0394	0.0497	0.0000	0.4271	0.3025	0.3053	4	-1.25	301.30	0
301	Acid Soluble Selenium (ppm)	0519	0.3600	0.0400	0.4271	0.3025	0.3053	4	-0.22	301.30	0
301	Acid Soluble Selenium (ppm)	0515	0.5294	0.4540	0.4271	0.3025	0.3053	4	0.34	301.33	0
301	Acid Soluble Selenium (ppm)	0515	0.7694	0.7272	0.4271	0.3025	0.3053	4	1.13	301.34	0
311	Sodium (%)	0096	0.0700	0.0000	0.1810	0.0374	0.0038	8	-2.80	311.99	0
311	Sodium (%)	0035	0.1465	0.0090	0.1810	0.0374	0.0038	8	-0.87	311.33	0
311	Sodium (%)	0354	0.1707	0.0034	0.1810	0.0374	0.0038	8	-0.26	311.99	0
311	Sodium (%)	0521	0.1784	0.0065	0.1810	0.0374	0.0038	8	-0.07	311.32	0
311	Sodium (%)	0102	0.1940	0.0020	0.1810	0.0374	0.0038	8	0.33	311.33	0
311	Sodium (%)	0482	0.2000	0.0000	0.1810	0.0374	0.0038	8	0.48	311.99	0
311	Sodium (%)	0423	0.2105	0.0010	0.1810	0.0374	0.0038	8	0.74	311.33	0
311	Sodium (%)	0086	0.2230	0.0081	0.1810	0.0374	0.0038	8	1.06	311.33	0
321	Acid Soluble Zinc (0.063%)	0324	0.00140*	0.0000	0.0573	0.0116	0.0035	46	-4.81	321.30	0
321	Acid Soluble Zinc (0.063%)	0096	0.01925*	0.0001	0.0573	0.0116	0.0035	46	-3.28	321.30	0
321	Acid Soluble Zinc (0.063%)	0506	0.03000*	0.0000	0.0573	0.0116	0.0035	46	-2.35	321.99	0
321	Acid Soluble Zinc (0.063%)	0420	0.03130*	0.0006	0.0573	0.0116	0.0035	46	-2.24	321.30	0
321	Acid Soluble Zinc (0.063%)	0354	0.03400*	0.0000	0.0573	0.0116	0.0035	46	-2.01	321.30	0
321	Acid Soluble Zinc (0.063%)	0428	0.04110*	0.0070	0.0573	0.0116	0.0035	46	-1.40	321.00	0
321	Acid Soluble Zinc (0.063%)	0397	0.04460*	0.0002	0.0573	0.0116	0.0035	46	-1.10	321.33	0
321	Acid Soluble Zinc (0.063%)	0035	0.04515*	0.0011	0.0573	0.0116	0.0035	46	-1.05	321.30	0
321	Acid Soluble Zinc (0.063%)	0233	0.0491	0.0233	0.0573	0.0116	0.0035	46	-0.71	321.30	0
321	Acid Soluble Zinc (0.063%)	0483	0.0495	0.0021	0.0573	0.0116	0.0035	46	-0.68	321.30	0
321	Acid Soluble Zinc (0.063%)	0072	0.0500	0.0000	0.0573	0.0116	0.0035	46	-0.63	321.30	0
321	Acid Soluble Zinc (0.063%)	0433	0.0526	0.0001	0.0573	0.0116	0.0035	46	-0.41	321.30	0
321	Acid Soluble Zinc (0.063%)	0230	0.0526	0.0050	0.0573	0.0116	0.0035	46	-0.41	321.30	0
321	Acid Soluble Zinc (0.063%)	0105	0.0530	0.0180	0.0573	0.0116	0.0035	46	-0.37	321.00	0
321	Acid Soluble Zinc (0.063%)	0105	0.0530	0.0160	0.0573	0.0116	0.0035	46	-0.37	321.03	0
321	Acid Soluble Zinc (0.063%)	0055	0.0536	0.0011	0.0573	0.0116	0.0035	46	-0.33	321.30	0
321	Acid Soluble Zinc (0.063%)	0090	0.0540	0.0020	0.0573	0.0116	0.0035	46	-0.29	321.30	0
321	Acid Soluble Zinc (0.063%)	0481	0.0550	0.0000	0.0573	0.0116	0.0035	46	-0.20	321.00	0
321	Acid Soluble Zinc (0.063%)	0390	0.0555	0.0006	0.0573	0.0116	0.0035	46	-0.16	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 (0.063%)	0037	0.0555	0.0024	0.0573	0.0116	0.0035	46	-0.16	321.33	0
321	Acid Soluble Zinc (0.063%)	0500	0.0557	0.0000	0.0573	0.0116	0.0035	46	-0.14	321.00	0
321	Acid Soluble Zinc (0.063%)	0102	0.0560	0.0000	0.0573	0.0116	0.0035	46	-0.12	321.30	0
321	Acid Soluble Zinc (0.063%)	0523	0.0570	0.0040	0.0573	0.0116	0.0035	46	-0.03	321.99	0
321	Acid Soluble Zinc (0.063%)	0220	0.0570	0.0020	0.0573	0.0116	0.0035	46	-0.03	321.99	0
321	Acid Soluble Zinc (0.063%)	0095	0.0577	0.0028	0.0573	0.0116	0.0035	46	0.03	321.30	0
321	Acid Soluble Zinc (0.063%)	0519	0.0585	0.0010	0.0573	0.0116	0.0035	46	0.10	321.30	0
321	Acid Soluble Zinc (0.063%)	0394	0.0590	0.0000	0.0573	0.0116	0.0035	46	0.14	321.32	0
321	Acid Soluble Zinc (0.063%)	0234	0.0600	0.0060	0.0573	0.0116	0.0035	46	0.23	321.30	0
321	Acid Soluble Zinc (0.063%)	0482	0.0600	0.0000	0.0573	0.0116	0.0035	46	0.23	321.30	0
321	Acid Soluble Zinc (0.063%)	0023	0.0605	0.0150	0.0573	0.0116	0.0035	46	0.27	321.33	0
321	Acid Soluble Zinc (0.063%)	0043	0.0620	0.0020	0.0573	0.0116	0.0035	46	0.40	321.00	0
321	Acid Soluble Zinc (0.063%)	0049	0.0629	0.0044	0.0573	0.0116	0.0035	46	0.48	321.30	0
321	Acid Soluble Zinc (0.063%)	0027	0.0630	0.0020	0.0573	0.0116	0.0035	46	0.49	321.99	0
321	Acid Soluble Zinc (0.063%)	0231	0.0635	0.0050	0.0573	0.0116	0.0035	46	0.53	321.30	0
321	Acid Soluble Zinc (0.063%)	0444	0.0635	0.0010	0.0573	0.0116	0.0035	46	0.53	321.30	0
321	Acid Soluble Zinc (0.063%)	0457	0.0643	0.0032	0.0573	0.0116	0.0035	46	0.60	321.00	0
321	Acid Soluble Zinc (0.063%)	0521	0.0647	0.0029	0.0573	0.0116	0.0035	46	0.63	321.32	0
321	Acid Soluble Zinc (0.063%)	0515	0.0661	0.0059	0.0573	0.0116	0.0035	46	0.75	321.99	0
321	Acid Soluble Zinc (0.063%)	0498	0.0695	0.0050	0.0573	0.0116	0.0035	46	1.05	321.00	0
321	Acid Soluble Zinc (0.063%)	0423	0.0715	0.0010	0.0573	0.0116	0.0035	46	1.22	321.32	0
321	Acid Soluble Zinc (0.063%)	0515	0.0718	0.0121	0.0573	0.0116	0.0035	46	1.24	321.33	0
321	Acid Soluble Zinc (0.063%)	0524	0.0725	0.0020	0.0573	0.0116	0.0035	46	1.30	321.99	0
321	Acid Soluble Zinc (0.063%)	0486	0.0735	0.0010	0.0573	0.0116	0.0035	46	1.39	321.33	0
321	Acid Soluble Zinc (0.063%)	0086	0.0773	0.0013	0.0573	0.0116	0.0035	46	1.71	321.33	0
321	Acid Soluble Zinc (0.063%)	0389	0.0774	0.0023	0.0573	0.0116	0.0035	46	1.72	321.99	0
321	Acid Soluble Zinc (0.063%)	0520	0.1011	0.0001	0.0573	0.0116	0.0035	46	3.76	321.30	0
321	Acid Soluble Zinc (0.063%)	0117	0.0511	0.0407	0.0573	0.0116	0.0035	46	-0.54	321.33	1
321	Acid Soluble Zinc (0.063%)	0472	0.0550	0.0300	0.0573	0.0116	0.0035	46	-0.20	321.30	1
325	Water Soluble Zinc (%)	0211	0.0560	0.0040	0.0756	0.0204	0.0116	5	-0.96	325.30	0
325	Water Soluble Zinc (%)	0027	0.0685	0.0010	0.0756	0.0204	0.0116	5	-0.35	325.00	0
325	Water Soluble Zinc (%)	0444	0.0685	0.0030	0.0756	0.0204	0.0116	5	-0.35	325.30	0
325	Water Soluble Zinc (%)	0402	0.0750	0.0100	0.0756	0.0204	0.0116	5	-0.03	325.30	0
325	Water Soluble Zinc (%)	0406	0.1100	0.0400	0.0756	0.0204	0.0116	5	1.68	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. 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 asterisk indicates that the value is lower than the Analyte value less the IA. Method or Analyte codes in light green indicate a guaranteed analyte. Individual lab values may be below detection limits but are reported solely for the purpose of this Proficiency Testing program.