

Analyte PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Analytes: 33

Sample # 230511

Regular PT Scheme

Labs Reporting: 67

Silicon Fertilizer

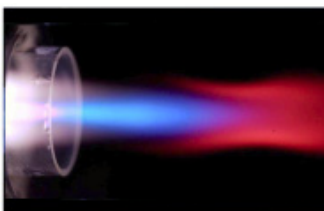
Statistical Summary

Issue Date : 06/30/2023

Analyte Code	Analyte Sample # 230511	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	Analyte IA Ratio	Average Range (R-bar)	Horwitz %RSD
001	Ammoniacal N (%)	2	0	0.0265	0.0364								
002	Nitrate N (%)	1		0.0023									
005	Urea N (%)	1		0.1250									
010	Total N (%)	8	6	2.228	6.153	0.0529	0.4900	0.0513	0.0262	97.04%	0.24	0.0238	6.23%
020	Total P2O5 (%)	7	6	0.3571	0.1706	0.4166		0.0817	0.0417	19.60%		0.0171	4.56%
041	Direct Available P2O5 (%)	6	5	0.3057	0.1414	0.2999	0.6700	0.1573	0.0879	52.46%	0.55	0.0000	4.79%
048	Water Soluble P2O5 (%)	1		0.0100									
050	Soluble K2O (%)	8	6	0.1778	0.1256	0.1807	0.4100	0.0728	0.0371	40.28%	0.41	0.0082	5.17%
060	Water (Free) (%)	2	2	0.5258	0.0909								
101	Acid Soluble Ca (26.5%)	56	55	25.71	2.388	25.49	1.0000	1.530	0.2579	6.00%	3.57	0.4488	1.98%
121	Acid Soluble Mg (4.8%)	57	57	6.078	0.7743	6.149	0.5074	0.6115	0.1012	9.95%	2.81	0.1971	3.04%
131	Water Soluble Mg (%)	1		7.277									
143	Elemental S (%)	5	5	0.3726	0.0759	0.3726		0.0759	0.0424	20.38%		0.0140	4.64%
145	Sulfate S, HCl soluble (%)	1		0.1300									
148	Total S (0.2%)	33	32	0.4483	0.3673	0.3654	0.2183	0.1714	0.0379	46.90%	1.83	0.0342	4.65%
149	S - HNO3 soluble (%)	2	2	0.2272	0.0384								
151	Acid Soluble As (ppm)	16	10	8.476	18.33	1.578		1.476	0.5833	93.51%		0.0000	14.94%
165	Acid Soluble B (%)	11	9	0.2606	0.6969	0.0235	0.0065	0.0207	0.0086	87.97%	7.38	0.0060	7.03%
181	Acid Soluble Cd (ppm)	18	10	2.539	4.076	3.182		4.795	1.896	150.71%		0.1199	13.44%
190	Water Soluble Cl (%)	1		0.1000									
191	Acid Soluble Cr (ppm)	17	17	1,368	289.9	1,371		320.8	97.27	23.41%		47.10	5.39%
202	Acid Soluble Co (ppm)	18	16	40.30	19.56	41.87	13.5616	19.83	6.198	47.37%	3.41	1.803	9.12%
221	Acid Soluble Cu (0.003%)	43	34	0.1249	0.7619	0.0027	0.0053	0.0016	0.0003	60.00%	0.71	0.0004	9.75%
241	Acid Soluble Fe (15.6%)	55	53	14.36	1.917	14.50	1.0000	1.365	0.2343	9.41%	3.18	0.3581	2.63%
251	Acid Soluble Pb (ppm)	18	11	23.04	56.54	11.16		9.339	3.520	83.67%		0.8734	11.13%
261	Acid Soluble Mn (2.3%)	54	53	3.039	10.30	1.615	0.1665	0.1667	0.0286	10.32%	2.33	0.0486	3.72%
281	Acid Soluble Hg (ppm)	6	3	0.0293	0.0380	0.0102		0.0076	0.0055	74.04%		0.0000	22.00%
289	Acid Soluble Mo (ppm)	14	14	29.41	14.86	28.20	9.4610	13.73	4.588	48.69%	3.38	4.012	9.68%
291	Acid Soluble Ni (ppm)	18	18	117.9	55.81	110.0		35.82	10.55	32.57%		6.920	7.89%

Analyte Code	Analyte Sample # 230511	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	Analyte IA Ratio	Average Range (R-bar)	Horwitz %RSD
301	Acid Soluble Se (ppm)	14	8	9.596	18.39	4.583		0.9442	0.4173	20.60%		0.3006	12.72%
311	Sodium (%)	9	9	0.0991	0.0101	0.1002	0.0150	0.0086	0.0036	8.56%	1.33	0.0049	5.65%
321	Acid Soluble Zn (%)	27	26	0.0245	0.0821	0.0086	0.0059	0.0019	0.0005	22.73%	0.77	0.0006	8.19%
431	Soluble Si in nonliquids (4%)	4	4	2.072	1.735	2.072		1.735	1.085	83.76%		0.0000	3.58%

The Analyte IA Ratio = $2.33 * \text{Robust SD} / \text{IA at the Analyte Assigned Value}$. IA ratios of 1 and less indicate participant data dispersion is as good or less than the IA. Red indicates the IA ratio is significantly greater than 1, Orange indicates marginally greater than 1, Green indicates IA ratio is not significantly greater than 1 and Grey indicates < 6 labs reporting. The Horwitz %RSD is calculated using the Thompson Modification, Analyst,2000,125,385-386.



Analyte PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Analytes: 33

Sample # 230511

Regular PT Scheme

Labs Reporting: 67

Silicon Fertilizer

Lab Values

Issue Date : 06/30/2023

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
001	Ammoniacal N (%)	0524	0.0522	0.1044				0		001.99	4
001	Ammoniacal N (%)	0553	< 0.0008					0		001.99	5
002	Nitrate N (%)	0553	< 0.0023					0		002.99	5
005	Urea N (%)	0524	0.1250	0.0500				1		005.99	0
010	Total N (%)	0472	0.0015	0.0010	0.0529	0.0513	0.0238	6	-0.89	010.60	0
010	Total N (%)	0568	0.0240	0.0000	0.0529	0.0513	0.0238	6	-0.50	010.12	0
010	Total N (%)	0588	0.0305	0.0019	0.0529	0.0513	0.0238	6	-0.39	010.60	0
010	Total N (%)	0524	0.0640	0.0149	0.0529	0.0513	0.0238	6	0.19	010.99	0
010	Total N (%)	0354	0.0675	0.0010	0.0529	0.0513	0.0238	6	0.25	010.60	0
010	Total N (%)	0624	0.1800	0.1000	0.0529	0.0513	0.0238	6	2.21	010.60	0
010	Total N (%)	0034	17.46	0.0500	0.0529	0.0513	0.0238	6	302.12	010.60	2
010	Total N (%)	0422	0.0000	0.0000	0.0529	0.0513	0.0238	6		010.60	4
020	Total P2O5 (%)	0472	0.3350	0.0100	0.4166	0.0817	0.0171	6	-0.89	020.50	0
020	Total P2O5 (%)	0588	0.3445	0.0330	0.4166	0.0817	0.0171	6	-0.79	020.50	0
020	Total P2O5 (%)	0572	0.4096	0.0117	0.4166	0.0817	0.0171	6	-0.08	020.99	0
020	Total P2O5 (%)	0524	0.4131	0.0031	0.4166	0.0817	0.0171	6	-0.04	020.50	0
020	Total P2O5 (%)	0527	0.4830	0.0108	0.4166	0.0817	0.0171	6	0.72	020.50	0
020	Total P2O5 (%)	0422	0.5146	0.0337	0.4166	0.0817	0.0171	6	1.07	020.50	0
020	Total P2O5 (%)	0552	0.0000	0.0000	0.4166	0.0817	0.0171	6		020.50	4
041	Direct Available P2O5 (%)	0553	0.0475	0.0090	0.2999	0.1573	0.0000	5	-1.40	041.20	0
041	Direct Available P2O5 (%)	0472	0.2500	0.0000	0.2999	0.1573	0.0000	5	-0.28	041.21	0
041	Direct Available P2O5 (%)	0354	0.3770	0.0020	0.2999	0.1573	0.0000	5	0.43	041.21	0
041	Direct Available P2O5 (%)	0009	0.3850	0.0100	0.2999	0.1573	0.0000	5	0.47	041.10	0
041	Direct Available P2O5 (%)	0568	0.4400	0.0000	0.2999	0.1573	0.0000	5	0.78	041.21	0
041	Direct Available P2O5 (%)	0624	0.3345	0.0510	0.2999	0.1573	0.0000	5	0.19	041.50	1
048	Water Soluble P2O5 (%)	0472	0.0100	0.0000				1		048.20	0
050	Soluble K2O (%)	0568	0.1000	0.0000	0.1807	0.0728	0.0082	6	-0.99	050.51	0
050	Soluble K2O (%)	0422	0.1394	0.0002	0.1807	0.0728	0.0082	6	-0.51	050.50	0
050	Soluble K2O (%)	0624	0.1685	0.0290	0.1807	0.0728	0.0082	6	-0.15	050.99	0
050	Soluble K2O (%)	0527	0.1926	0.0053	0.1807	0.0728	0.0082	6	0.15	050.99	0
050	Soluble K2O (%)	0524	0.1939	0.0037	0.1807	0.0728	0.0082	6	0.16	050.99	0
050	Soluble K2O (%)	0354	0.4435	0.0030	0.1807	0.0728	0.0082	6	3.22	050.52	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
050	Soluble K2O (%)	0588	0.1845	0.0630	0.1807	0.0728	0.0082	6	0.05	050.99	1
050	Soluble K2O (%)	0552	0.0000	0.0000	0.1807	0.0728	0.0082	6		050.99	4
060	Water (Free) (%)	0510	0.4615	0.0130				2		060.99	0
060	Water (Free) (%)	0009	0.5900	0.0000				2		060.99	0
101	Acid Soluble Ca (26.5%)	0494	21.82†	1.621	25.49	1.530	0.4488	55	-2.40	101.33	0
101	Acid Soluble Ca (26.5%)	0510	21.88†	0.1358	25.49	1.530	0.4488	55	-2.35	101.70	0
101	Acid Soluble Ca (26.5%)	0580	22.63†	0.2500	25.49	1.530	0.4488	55	-1.87	101.01	0
101	Acid Soluble Ca (26.5%)	0485	22.65†	0.5600	25.49	1.530	0.4488	55	-1.85	101.00	0
101	Acid Soluble Ca (26.5%)	0009	23.00†	0.0000	25.49	1.530	0.4488	55	-1.63	101.33	0
101	Acid Soluble Ca (26.5%)	0073	23.02†	0.4400	25.49	1.530	0.4488	55	-1.61	101.32	0
101	Acid Soluble Ca (26.5%)	0368	23.12†	0.0355	25.49	1.530	0.4488	55	-1.55	101.99	0
101	Acid Soluble Ca (26.5%)	0552	23.56†	0.1300	25.49	1.530	0.4488	55	-1.26	101.99	0
101	Acid Soluble Ca (26.5%)	0086	23.88†	0.8502	25.49	1.530	0.4488	55	-1.05	101.33	0
101	Acid Soluble Ca (26.5%)	0055	24.12†	0.1400	25.49	1.530	0.4488	55	-0.89	101.33	0
101	Acid Soluble Ca (26.5%)	0472	24.29†	0.1800	25.49	1.530	0.4488	55	-0.78	101.33	0
101	Acid Soluble Ca (26.5%)	0042	24.35†	4.050	25.49	1.530	0.4488	55	-0.75	101.99	0
101	Acid Soluble Ca (26.5%)	0543	24.47†	0.4490	25.49	1.530	0.4488	55	-0.67	101.33	0
101	Acid Soluble Ca (26.5%)	0230	24.50	0.5100	25.49	1.530	0.4488	55	-0.65	101.70	0
101	Acid Soluble Ca (26.5%)	0377	24.54	0.5000	25.49	1.530	0.4488	55	-0.62	101.30	0
101	Acid Soluble Ca (26.5%)	0040	24.60	0.3600	25.49	1.530	0.4488	55	-0.58	101.33	0
101	Acid Soluble Ca (26.5%)	0231	24.79	0.1500	25.49	1.530	0.4488	55	-0.46	101.30	0
101	Acid Soluble Ca (26.5%)	0106	24.81	0.2533	25.49	1.530	0.4488	55	-0.44	101.33	0
101	Acid Soluble Ca (26.5%)	0624	24.86	0.7500	25.49	1.530	0.4488	55	-0.41	101.33	0
101	Acid Soluble Ca (26.5%)	0255	25.05	0.0300	25.49	1.530	0.4488	55	-0.29	101.30	0
101	Acid Soluble Ca (26.5%)	0177	25.05	0.0946	25.49	1.530	0.4488	55	-0.29	101.33	0
101	Acid Soluble Ca (26.5%)	0043	25.32	0.5100	25.49	1.530	0.4488	55	-0.11	101.33	0
101	Acid Soluble Ca (26.5%)	0233	25.32	0.2700	25.49	1.530	0.4488	55	-0.11	101.33	0
101	Acid Soluble Ca (26.5%)	0360	25.36	0.6000	25.49	1.530	0.4488	55	-0.08	101.30	0
101	Acid Soluble Ca (26.5%)	0354	25.40	0.2000	25.49	1.530	0.4488	55	-0.06	101.30	0
101	Acid Soluble Ca (26.5%)	0587	25.44	0.1400	25.49	1.530	0.4488	55	-0.03	101.99	0
101	Acid Soluble Ca (26.5%)	0035	25.50	0.0000	25.49	1.530	0.4488	55	0.01	101.30	0
101	Acid Soluble Ca (26.5%)	0605	25.52	0.2000	25.49	1.530	0.4488	55	0.02	101.99	0
101	Acid Soluble Ca (26.5%)	0324	25.60	1.600	25.49	1.530	0.4488	55	0.07	101.30	0
101	Acid Soluble Ca (26.5%)	0389	25.74	0.0900	25.49	1.530	0.4488	55	0.16	101.99	0
101	Acid Soluble Ca (26.5%)	0527	25.75	0.0823	25.49	1.530	0.4488	55	0.17	101.33	0
101	Acid Soluble Ca (26.5%)	0568	26.00	0.0000	25.49	1.530	0.4488	55	0.33	101.30	0
101	Acid Soluble Ca (26.5%)	0451	26.06	0.2100	25.49	1.530	0.4488	55	0.37	101.30	0
101	Acid Soluble Ca (26.5%)	0609	26.10	0.0000	25.49	1.530	0.4488	55	0.40	101.33	0
101	Acid Soluble Ca (26.5%)	0292	26.12	0.1400	25.49	1.530	0.4488	55	0.41	101.33	0
101	Acid Soluble Ca (26.5%)	0572	26.28	0.0378	25.49	1.530	0.4488	55	0.52	101.99	0
101	Acid Soluble Ca (26.5%)	0521	26.29	1.050	25.49	1.530	0.4488	55	0.52	101.33	0
101	Acid Soluble Ca (26.5%)	0023	26.33	0.4020	25.49	1.530	0.4488	55	0.55	101.31	0
101	Acid Soluble Ca (26.5%)	0307	26.35	1.330	25.49	1.530	0.4488	55	0.56	101.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
101	Acid Soluble Ca (26.5%)	0619	26.40	0.6000	25.49	1.530	0.4488	55	0.60	101.30	0
101	Acid Soluble Ca (26.5%)	0619	26.40	0.6000	25.49	1.530	0.4488	55	0.60	101.99	0
101	Acid Soluble Ca (26.5%)	0136	26.52±	0.2500	25.49	1.530	0.4488	55	0.67	101.33	0
101	Acid Soluble Ca (26.5%)	0291	26.57±	0.0100	25.49	1.530	0.4488	55	0.70	101.30	0
101	Acid Soluble Ca (26.5%)	0433	26.66±	0.2800	25.49	1.530	0.4488	55	0.77	101.30	0
101	Acid Soluble Ca (26.5%)	0421	26.66±	0.7200	25.49	1.530	0.4488	55	0.77	101.33	0
101	Acid Soluble Ca (26.5%)	0029	26.84±	0.4700	25.49	1.530	0.4488	55	0.88	101.00	0
101	Acid Soluble Ca (26.5%)	0523	26.96±	1.160	25.49	1.530	0.4488	55	0.96	101.99	0
101	Acid Soluble Ca (26.5%)	0027	26.97±	1.160	25.49	1.530	0.4488	55	0.97	101.99	0
101	Acid Soluble Ca (26.5%)	0102	27.07±	0.1600	25.49	1.530	0.4488	55	1.03	101.33	0
101	Acid Soluble Ca (26.5%)	0049	27.12±	2.907	25.49	1.530	0.4488	55	1.07	101.30	0
101	Acid Soluble Ca (26.5%)	0553	27.25±	0.1000	25.49	1.530	0.4488	55	1.15	101.00	0
101	Acid Soluble Ca (26.5%)	0394	27.46±	0.0960	25.49	1.530	0.4488	55	1.29	101.33	0
101	Acid Soluble Ca (26.5%)	0515	27.99±	1.240	25.49	1.530	0.4488	55	1.63	101.99	0
101	Acid Soluble Ca (26.5%)	0452	28.40±	0.0900	25.49	1.530	0.4488	55	1.90	101.30	0
101	Acid Soluble Ca (26.5%)	0515	30.35±	1.810	25.49	1.530	0.4488	55	3.17	101.33	0
101	Acid Soluble Ca (26.5%)	0220	38.60±	29.86	25.49	1.530	0.4488	55	8.57	101.32	1
121	Acid Soluble Mg (4.8%)	0230	2.680±	0.4600	6.149	0.6115	0.1971	57	-5.67	121.70	0
121	Acid Soluble Mg (4.8%)	0619	4.785±	0.4300	6.149	0.6115	0.1971	57	-2.23	121.30	0
121	Acid Soluble Mg (4.8%)	0042	4.785±	0.1100	6.149	0.6115	0.1971	57	-2.23	121.99	0
121	Acid Soluble Mg (4.8%)	0619	4.785±	0.4300	6.149	0.6115	0.1971	57	-2.23	121.99	0
121	Acid Soluble Mg (4.8%)	0624	4.792±	0.2620	6.149	0.6115	0.1971	57	-2.22	121.33	0
121	Acid Soluble Mg (4.8%)	0234	4.880±	0.6400	6.149	0.6115	0.1971	57	-2.07	121.30	0
121	Acid Soluble Mg (4.8%)	0073	5.205±	0.2100	6.149	0.6115	0.1971	57	-1.54	121.32	0
121	Acid Soluble Mg (4.8%)	0255	5.228±	0.0150	6.149	0.6115	0.1971	57	-1.51	121.30	0
121	Acid Soluble Mg (4.8%)	0515	5.464±	0.0910	6.149	0.6115	0.1971	57	-1.12	121.33	0
121	Acid Soluble Mg (4.8%)	0515	5.488±	0.2480	6.149	0.6115	0.1971	57	-1.08	121.99	0
121	Acid Soluble Mg (4.8%)	0231	5.695	0.0700	6.149	0.6115	0.1971	57	-0.74	121.30	0
121	Acid Soluble Mg (4.8%)	0009	5.750	0.1000	6.149	0.6115	0.1971	57	-0.65	121.33	0
121	Acid Soluble Mg (4.8%)	0055	5.780	0.5000	6.149	0.6115	0.1971	57	-0.60	121.33	0
121	Acid Soluble Mg (4.8%)	0451	5.875	0.1110	6.149	0.6115	0.1971	57	-0.45	121.30	0
121	Acid Soluble Mg (4.8%)	0043	5.900	0.1000	6.149	0.6115	0.1971	57	-0.41	121.33	0
121	Acid Soluble Mg (4.8%)	0521	5.905	0.2900	6.149	0.6115	0.1971	57	-0.40	121.33	0
121	Acid Soluble Mg (4.8%)	0177	5.929	0.0063	6.149	0.6115	0.1971	57	-0.36	121.33	0
121	Acid Soluble Mg (4.8%)	0220	5.940	0.0600	6.149	0.6115	0.1971	57	-0.34	121.32	0
121	Acid Soluble Mg (4.8%)	0307	5.960	0.1200	6.149	0.6115	0.1971	57	-0.31	121.99	0
121	Acid Soluble Mg (4.8%)	0485	5.965	0.2500	6.149	0.6115	0.1971	57	-0.30	121.00	0
121	Acid Soluble Mg (4.8%)	0035	5.990	0.2200	6.149	0.6115	0.1971	57	-0.26	121.30	0
121	Acid Soluble Mg (4.8%)	0377	5.990	0.1600	6.149	0.6115	0.1971	57	-0.26	121.30	0
121	Acid Soluble Mg (4.8%)	0354	6.005	0.6100	6.149	0.6115	0.1971	57	-0.23	121.30	0
121	Acid Soluble Mg (4.8%)	0040	6.010	0.1400	6.149	0.6115	0.1971	57	-0.23	121.00	0
121	Acid Soluble Mg (4.8%)	0605	6.025	0.1900	6.149	0.6115	0.1971	57	-0.20	121.99	0
121	Acid Soluble Mg (4.8%)	0494	6.033	0.6072	6.149	0.6115	0.1971	57	-0.19	121.33	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
121	Acid Soluble Mg (4.8%)	0106	6.048	0.3775	6.149	0.6115	0.1971	57	-0.16	121.33	0
121	Acid Soluble Mg (4.8%)	0233	6.076	0.1220	6.149	0.6115	0.1971	57	-0.12	121.33	0
121	Acid Soluble Mg (4.8%)	0368	6.099	0.1051	6.149	0.6115	0.1971	57	-0.08	121.99	0
121	Acid Soluble Mg (4.8%)	0394	6.100	0.0008	6.149	0.6115	0.1971	57	-0.08	121.33	0
121	Acid Soluble Mg (4.8%)	0324	6.170	0.2800	6.149	0.6115	0.1971	57	0.03	121.30	0
121	Acid Soluble Mg (4.8%)	0433	6.264	0.0740	6.149	0.6115	0.1971	57	0.19	121.30	0
121	Acid Soluble Mg (4.8%)	0524	6.317	0.2436	6.149	0.6115	0.1971	57	0.27	121.99	0
121	Acid Soluble Mg (4.8%)	0552	6.320	0.0400	6.149	0.6115	0.1971	57	0.28	121.99	0
121	Acid Soluble Mg (4.8%)	0117	6.347	0.0754	6.149	0.6115	0.1971	57	0.32	121.33	0
121	Acid Soluble Mg (4.8%)	0049	6.355	0.6500	6.149	0.6115	0.1971	57	0.34	121.30	0
121	Acid Soluble Mg (4.8%)	0086	6.429	0.6995	6.149	0.6115	0.1971	57	0.46	121.33	0
121	Acid Soluble Mg (4.8%)	0360	6.460	0.2000	6.149	0.6115	0.1971	57	0.51	121.30	0
121	Acid Soluble Mg (4.8%)	0136	6.480	0.0600	6.149	0.6115	0.1971	57	0.54	121.33	0
121	Acid Soluble Mg (4.8%)	0291	6.490	0.0200	6.149	0.6115	0.1971	57	0.56	121.30	0
121	Acid Soluble Mg (4.8%)	0587	6.495	0.1100	6.149	0.6115	0.1971	57	0.57	121.99	0
121	Acid Soluble Mg (4.8%)	0543	6.525	0.0990	6.149	0.6115	0.1971	57	0.61	121.33	0
121	Acid Soluble Mg (4.8%)	0292	6.525	0.0300	6.149	0.6115	0.1971	57	0.62	121.32	0
121	Acid Soluble Mg (4.8%)	0568	6.550	0.0000	6.149	0.6115	0.1971	57	0.66	121.30	0
121	Acid Soluble Mg (4.8%)	0572	6.553	0.1985	6.149	0.6115	0.1971	57	0.66	121.99	0
121	Acid Soluble Mg (4.8%)	0527	6.620	0.0611	6.149	0.6115	0.1971	57	0.77	121.33	0
121	Acid Soluble Mg (4.8%)	0609	6.655	0.0300	6.149	0.6115	0.1971	57	0.83	121.33	0
121	Acid Soluble Mg (4.8%)	0023	6.691‡	0.0080	6.149	0.6115	0.1971	57	0.89	121.32	0
121	Acid Soluble Mg (4.8%)	0553	6.725‡	0.3500	6.149	0.6115	0.1971	57	0.94	121.00	0
121	Acid Soluble Mg (4.8%)	0027	6.765‡	0.4100	6.149	0.6115	0.1971	57	1.01	121.99	0
121	Acid Soluble Mg (4.8%)	0452	6.875‡	0.1300	6.149	0.6115	0.1971	57	1.19	121.30	0
121	Acid Soluble Mg (4.8%)	0029	6.891‡	0.3340	6.149	0.6115	0.1971	57	1.21	121.00	0
121	Acid Soluble Mg (4.8%)	0421	6.905‡	0.0700	6.149	0.6115	0.1971	57	1.24	121.33	0
121	Acid Soluble Mg (4.8%)	0580	6.990‡	0.2800	6.149	0.6115	0.1971	57	1.38	121.01	0
121	Acid Soluble Mg (4.8%)	0472	7.115‡	0.0900	6.149	0.6115	0.1971	57	1.58	121.33	0
121	Acid Soluble Mg (4.8%)	0102	7.320‡	0.1400	6.149	0.6115	0.1971	57	1.92	121.33	0
121	Acid Soluble Mg (4.8%)	0523	7.460‡	0.3400	6.149	0.6115	0.1971	57	2.14	121.99	0
131	Water Soluble Mg (%)	0510	7.277	0.0167				1		131.70	0
143	Elemental S (%)	0291	0.3075	0.0010	0.3726	0.0759	0.0140	5	-0.86	143.99	0
143	Elemental S (%)	0368	0.3121	0.0101	0.3726	0.0759	0.0140	5	-0.80	143.99	0
143	Elemental S (%)	0255	0.3335	0.0050	0.3726	0.0759	0.0140	5	-0.52	143.99	0
143	Elemental S (%)	0389	0.4500	0.0000	0.3726	0.0759	0.0140	5	1.02	143.99	0
143	Elemental S (%)	0106	0.4600	0.0400	0.3726	0.0759	0.0140	5	1.15	143.00	0
145	Sulfate S, HCl soluble (%)	0027	0.1300	0.0200				1		145.00	0
148	Total S (0.2%)	0354	0.08500†	0.0100	0.3654	0.1714	0.0342	32	-1.64	148.99	0
148	Total S (0.2%)	0485	0.1360†	0.0020	0.3654	0.1714	0.0342	32	-1.34	148.01	0
148	Total S (0.2%)	0562	0.1700	0.0200	0.3654	0.1714	0.0342	32	-1.14	148.99	0
148	Total S (0.2%)	0600	0.1700	0.0200	0.3654	0.1714	0.0342	32	-1.14	148.99	0
148	Total S (0.2%)	0559	0.1750	0.0100	0.3654	0.1714	0.0342	32	-1.11	148.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
148	Total S (0.2%)	0584	0.2385	0.0430	0.3654	0.1714	0.0342	32	-0.74	148.01	0
148	Total S (0.2%)	0117	0.2492	0.0114	0.3654	0.1714	0.0342	32	-0.68	148.07	0
148	Total S (0.2%)	0043	0.2680	0.0160	0.3654	0.1714	0.0342	32	-0.57	148.07	0
148	Total S (0.2%)	0452	0.2900	0.0000	0.3654	0.1714	0.0342	32	-0.44	148.99	0
148	Total S (0.2%)	0605	0.2900	0.0400	0.3654	0.1714	0.0342	32	-0.44	148.99	0
148	Total S (0.2%)	0292	0.3100	0.0000	0.3654	0.1714	0.0342	32	-0.32	148.07	0
148	Total S (0.2%)	0494	0.3194	0.0348	0.3654	0.1714	0.0342	32	-0.27	148.07	0
148	Total S (0.2%)	0572	0.3229	0.0297	0.3654	0.1714	0.0342	32	-0.25	148.99	0
148	Total S (0.2%)	0619	0.3270	0.0260	0.3654	0.1714	0.0342	32	-0.22	148.07	0
148	Total S (0.2%)	0619	0.3270	0.0260	0.3654	0.1714	0.0342	32	-0.22	148.99	0
148	Total S (0.2%)	0351	0.3300	0.0600	0.3654	0.1714	0.0342	32	-0.21	148.00	0
148	Total S (0.2%)	0421	0.3350	0.0100	0.3654	0.1714	0.0342	32	-0.18	148.07	0
148	Total S (0.2%)	0157	0.3465	0.0510	0.3654	0.1714	0.0342	32	-0.11	148.00	0
148	Total S (0.2%)	0624	0.3506	0.0141	0.3654	0.1714	0.0342	32	-0.09	148.07	0
148	Total S (0.2%)	0023	0.3660	0.0620	0.3654	0.1714	0.0342	32	0.00	148.07	0
148	Total S (0.2%)	0136	0.3700	0.0200	0.3654	0.1714	0.0342	32	0.03	148.07	0
148	Total S (0.2%)	0515	0.3780	0.0350	0.3654	0.1714	0.0342	32	0.07	148.07	0
148	Total S (0.2%)	0220	0.3900	0.0400	0.3654	0.1714	0.0342	32	0.14	148.99	0
148	Total S (0.2%)	0394	0.4515	0.0046	0.3654	0.1714	0.0342	32	0.50	148.07	0
148	Total S (0.2%)	0049	0.4850	0.0900	0.3654	0.1714	0.0342	32	0.70	148.00	0
148	Total S (0.2%)	0472	0.5150	0.0100	0.3654	0.1714	0.0342	32	0.87	148.07	0
148	Total S (0.2%)	0073	0.5610	0.0680	0.3654	0.1714	0.0342	32	1.14	148.00	0
148	Total S (0.2%)	0177	0.6275‡	0.0057	0.3654	0.1714	0.0342	32	1.53	148.07	0
148	Total S (0.2%)	0102	0.6600‡	0.0600	0.3654	0.1714	0.0342	32	1.72	148.07	0
148	Total S (0.2%)	0422	0.6870‡	0.0690	0.3654	0.1714	0.0342	32	1.88	148.99	0
148	Total S (0.2%)	0523	1.000‡	0.0800	0.3654	0.1714	0.0342	32	3.70	148.99	0
148	Total S (0.2%)	0377	1.255‡	0.2300	0.3654	0.1714	0.0342	32	5.19	148.99	0
148	Total S (0.2%)	0543	2.009‡	0.8630	0.3654	0.1714	0.0342	32	9.59	148.07	1
149	S - HNO3 soluble (%)	0231	0.2000	0.0000				2		149.04	0
149	S - HNO3 soluble (%)	0524	0.2544	0.0015				2		149.04	0
151	Acid Soluble As (ppm)	0220	0.2000	0.0000	1.578	1.476	0.0000	10	-0.93	151.32	0
151	Acid Soluble As (ppm)	0220	0.2000	0.0000	1.578	1.476	0.0000	10	-0.93	151.99	0
151	Acid Soluble As (ppm)	0605	0.4800	0.0000	1.578	1.476	0.0000	10	-0.74	151.30	0
151	Acid Soluble As (ppm)	0524	1.113	0.0127	1.578	1.476	0.0000	10	-0.31	151.30	0
151	Acid Soluble As (ppm)	0572	1.150	0.0153	1.578	1.476	0.0000	10	-0.29	151.99	0
151	Acid Soluble As (ppm)	0523	1.626	0.1120	1.578	1.476	0.0000	10	0.03	151.30	0
151	Acid Soluble As (ppm)	0009	1.700	0.0000	1.578	1.476	0.0000	10	0.08	151.99	0
151	Acid Soluble As (ppm)	0527	1.727	0.0550	1.578	1.476	0.0000	10	0.10	151.33	0
151	Acid Soluble As (ppm)	0624	12.88	1.350	1.578	1.476	0.0000	10	7.66	151.33	0
151	Acid Soluble As (ppm)	0494	62.70	0.6000	1.578	1.476	0.0000	10	41.42	151.33	0
151	Acid Soluble As (ppm)	0515	45.36	21.51	1.578	1.476	0.0000	10	29.67	151.33	1
151	Acid Soluble As (ppm)	0255	0.0000	0.0000	1.578	1.476	0.0000	10		151.30	4
151	Acid Soluble As (ppm)	0515	< 0.186		1.578	1.476	0.0000	10		151.34	5

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
151	Acid Soluble As (ppm)	0368	< 0.3		1.578	1.476	0.0000	10		151.34	5
151	Acid Soluble As (ppm)	0136	< 1		1.578	1.476	0.0000	10		151.33	5
151	Acid Soluble As (ppm)	0009	< 5		1.578	1.476	0.0000	10		151.33	5
165	Acid Soluble B (%)	0009	0.0083	0.0004	0.0235	0.0207	0.0060	9	-0.68	165.99	0
165	Acid Soluble B (%)	0354	0.0100	0.0000	0.0235	0.0207	0.0060	9	-0.60	165.30	0
165	Acid Soluble B (%)	0494	0.0100	0.0002	0.0235	0.0207	0.0060	9	-0.60	165.30	0
165	Acid Soluble B (%)	0527	0.0110	0.0001	0.0235	0.0207	0.0060	9	-0.56	165.99	0
165	Acid Soluble B (%)	0524	0.0144	0.0003	0.0235	0.0207	0.0060	9	-0.41	165.99	0
165	Acid Soluble B (%)	0422	0.0213	0.0008	0.0235	0.0207	0.0060	9	-0.10	165.30	0
165	Acid Soluble B (%)	0472	0.0300	0.0200	0.0235	0.0207	0.0060	9	0.29	165.99	0
165	Acid Soluble B (%)	0624	0.0520	0.0040	0.0235	0.0207	0.0060	9	1.27	165.99	0
165	Acid Soluble B (%)	0552	0.3600	0.0600	0.0235	0.0207	0.0060	9	15.03	165.99	0
165	Acid Soluble B (%)	0515	2.339	1.421	0.0235	0.0207	0.0060	9	103.43	165.99	1
165	Acid Soluble B (%)	0572	< 0.0108		0.0235	0.0207	0.0060	9		165.99	5
181	Acid Soluble Cd (ppm)	0220	0.0300	0.0000	3.182	4.795	0.1199	10	-0.66	181.99	0
181	Acid Soluble Cd (ppm)	0523	0.0560	0.0100	3.182	4.795	0.1199	10	-0.65	181.30	0
181	Acid Soluble Cd (ppm)	0572	0.0835	0.0242	3.182	4.795	0.1199	10	-0.65	181.99	0
181	Acid Soluble Cd (ppm)	0086	0.1739	0.0065	3.182	4.795	0.1199	10	-0.63	181.33	0
181	Acid Soluble Cd (ppm)	0394	0.2755	0.0090	3.182	4.795	0.1199	10	-0.61	181.30	0
181	Acid Soluble Cd (ppm)	0494	1.640	0.0600	3.182	4.795	0.1199	10	-0.32	181.33	0
181	Acid Soluble Cd (ppm)	0524	2.685	0.0168	3.182	4.795	0.1199	10	-0.10	181.30	0
181	Acid Soluble Cd (ppm)	0368	6.200	0.4000	3.182	4.795	0.1199	10	0.63	181.34	0
181	Acid Soluble Cd (ppm)	0605	10.30	0.0000	3.182	4.795	0.1199	10	1.48	181.30	0
181	Acid Soluble Cd (ppm)	0624	14.57	1.002	3.182	4.795	0.1199	10	2.38	181.33	0
181	Acid Soluble Cd (ppm)	0255	1.232	2.464	3.182	4.795	0.1199	10		181.30	4
181	Acid Soluble Cd (ppm)	0527	< 0.0001		3.182	4.795	0.1199	10		181.33	5
181	Acid Soluble Cd (ppm)	0009	< 0.13		3.182	4.795	0.1199	10		181.99	5
181	Acid Soluble Cd (ppm)	0515	< 0.133		3.182	4.795	0.1199	10		181.34	5
181	Acid Soluble Cd (ppm)	0515	< 0.19		3.182	4.795	0.1199	10		181.33	5
181	Acid Soluble Cd (ppm)	0136	< 1		3.182	4.795	0.1199	10		181.33	5
181	Acid Soluble Cd (ppm)	0009	< 2		3.182	4.795	0.1199	10		181.33	5
181	Acid Soluble Cd (ppm)	0117	< 5		3.182	4.795	0.1199	10		181.33	5
190	Water Soluble Cl (%)	0553	< 0.1					0		190.00	5
191	Acid Soluble Cr (ppm)	0035	833.5	119.0	1,371	320.8	47.10	17	-1.67	191.30	0
191	Acid Soluble Cr (ppm)	0394	910.6	41.59	1,371	320.8	47.10	17	-1.43	191.30	0
191	Acid Soluble Cr (ppm)	0624	981.4	38.86	1,371	320.8	47.10	17	-1.21	191.33	0
191	Acid Soluble Cr (ppm)	0605	1,165	42.70	1,371	320.8	47.10	17	-0.64	191.30	0
191	Acid Soluble Cr (ppm)	0572	1,183	28.49	1,371	320.8	47.10	17	-0.59	191.99	0
191	Acid Soluble Cr (ppm)	0086	1,184	52.70	1,371	320.8	47.10	17	-0.58	191.33	0
191	Acid Soluble Cr (ppm)	0494	1,288	43.00	1,371	320.8	47.10	17	-0.26	191.33	0
191	Acid Soluble Cr (ppm)	0136	1,361	30.00	1,371	320.8	47.10	17	-0.03	191.33	0
191	Acid Soluble Cr (ppm)	0368	1,435	30.00	1,371	320.8	47.10	17	0.20	191.34	0
191	Acid Soluble Cr (ppm)	0009	1,500	0.0000	1,371	320.8	47.10	17	0.40	191.33	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
191	Acid Soluble Cr (ppm)	0117	1,517	17.31	1,371	320.8	47.10	17	0.46	191.33	0
191	Acid Soluble Cr (ppm)	0009	1,550	100.0	1,371	320.8	47.10	17	0.56	191.99	0
191	Acid Soluble Cr (ppm)	0527	1,577	57.54	1,371	320.8	47.10	17	0.64	191.33	0
191	Acid Soluble Cr (ppm)	0515	1,603	64.00	1,371	320.8	47.10	17	0.72	191.34	0
191	Acid Soluble Cr (ppm)	0523	1,608	41.68	1,371	320.8	47.10	17	0.74	191.30	0
191	Acid Soluble Cr (ppm)	0524	1,698	28.28	1,371	320.8	47.10	17	1.02	191.30	0
191	Acid Soluble Cr (ppm)	0515	1,859	76.00	1,371	320.8	47.10	17	1.52	191.33	0
202	Acid Soluble Co (ppm)	0572	11.87	2.738	41.87	19.83	1.803	16	-1.51	202.99	0
202	Acid Soluble Co (ppm)	0368	18.60	0.8000	41.87	19.83	1.803	16	-1.17	202.34	0
202	Acid Soluble Co (ppm)	0220	18.90	0.4000	41.87	19.83	1.803	16	-1.16	202.32	0
202	Acid Soluble Co (ppm)	0136	18.99	0.7800	41.87	19.83	1.803	16	-1.15	202.33	0
202	Acid Soluble Co (ppm)	0515	27.87	6.260	41.87	19.83	1.803	16	-0.71	202.34	0
202	Acid Soluble Co (ppm)	0035	38.50	3.000	41.87	19.83	1.803	16	-0.17	202.30	0
202	Acid Soluble Co (ppm)	0220	39.00	2.000	41.87	19.83	1.803	16	-0.14	202.99	0
202	Acid Soluble Co (ppm)	0527	47.48	0.1526	41.87	19.83	1.803	16	0.28	202.33	0
202	Acid Soluble Co (ppm)	0494	48.75	1.700	41.87	19.83	1.803	16	0.35	202.33	0
202	Acid Soluble Co (ppm)	0515	52.36	12.15	41.87	19.83	1.803	16	0.53	202.33	0
202	Acid Soluble Co (ppm)	0009	53.00	2.000	41.87	19.83	1.803	16	0.56	202.33	0
202	Acid Soluble Co (ppm)	0117	54.29	2.351	41.87	19.83	1.803	16	0.63	202.33	0
202	Acid Soluble Co (ppm)	0009	55.00	2.000	41.87	19.83	1.803	16	0.66	202.99	0
202	Acid Soluble Co (ppm)	0524	55.13	0.9755	41.87	19.83	1.803	16	0.67	202.30	0
202	Acid Soluble Co (ppm)	0605	62.53	0.0000	41.87	19.83	1.803	16	1.04	202.30	0
202	Acid Soluble Co (ppm)	0523	67.43	0.4170	41.87	19.83	1.803	16	1.29	202.30	0
202	Acid Soluble Co (ppm)	0086	55.75	19.80	41.87	19.83	1.803	16	0.70	202.33	1
202	Acid Soluble Co (ppm)	0255	0.0000	0.0000	41.87	19.83	1.803	16		202.99	4
221	Acid Soluble Cu (0.003%)	0368	0.0004	0.0002	0.0027	0.0016	0.0004	34	-1.42	221.99	0
221	Acid Soluble Cu (0.003%)	0234	0.0005	0.0000	0.0027	0.0016	0.0004	34	-1.36	221.30	0
221	Acid Soluble Cu (0.003%)	0360	0.0007	0.0009	0.0027	0.0016	0.0004	34	-1.26	221.30	0
221	Acid Soluble Cu (0.003%)	0543	0.0010	0.0000	0.0027	0.0016	0.0004	34	-1.05	221.33	0
221	Acid Soluble Cu (0.003%)	0389	0.0010	0.0000	0.0027	0.0016	0.0004	34	-1.05	221.99	0
221	Acid Soluble Cu (0.003%)	0523	0.0010	0.0000	0.0027	0.0016	0.0004	34	-1.05	221.99	0
221	Acid Soluble Cu (0.003%)	0035	0.0011	0.0000	0.0027	0.0016	0.0004	34	-0.98	221.30	0
221	Acid Soluble Cu (0.003%)	0609	0.0014	0.0000	0.0027	0.0016	0.0004	34	-0.80	221.33	0
221	Acid Soluble Cu (0.003%)	0220	0.0018	0.0001	0.0027	0.0016	0.0004	34	-0.58	221.32	0
221	Acid Soluble Cu (0.003%)	0377	0.0019	0.0001	0.0027	0.0016	0.0004	34	-0.52	221.30	0
221	Acid Soluble Cu (0.003%)	0106	0.0019	0.0001	0.0027	0.0016	0.0004	34	-0.52	221.33	0
221	Acid Soluble Cu (0.003%)	0521	0.0020	0.0000	0.0027	0.0016	0.0004	34	-0.42	221.33	0
221	Acid Soluble Cu (0.003%)	0572	0.0021	0.0003	0.0027	0.0016	0.0004	34	-0.39	221.99	0
221	Acid Soluble Cu (0.003%)	0485	0.0022	0.0001	0.0027	0.0016	0.0004	34	-0.33	221.00	0
221	Acid Soluble Cu (0.003%)	0086	0.0022	0.0002	0.0027	0.0016	0.0004	34	-0.30	221.33	0
221	Acid Soluble Cu (0.003%)	0042	0.0023	0.0001	0.0027	0.0016	0.0004	34	-0.27	221.99	0
221	Acid Soluble Cu (0.003%)	0527	0.0026	0.0001	0.0027	0.0016	0.0004	34	-0.08	221.33	0
221	Acid Soluble Cu (0.003%)	0515	0.0028	0.0008	0.0027	0.0016	0.0004	34	0.07	221.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
221	Acid Soluble Cu (0.003%)	0524	0.0028	0.0006	0.0027	0.0016	0.0004	34	0.07	221.99	0
221	Acid Soluble Cu (0.003%)	0624	0.0030	0.0001	0.0027	0.0016	0.0004	34	0.17	221.33	0
221	Acid Soluble Cu (0.003%)	0444	0.0030	0.0000	0.0027	0.0016	0.0004	34	0.20	221.31	0
221	Acid Soluble Cu (0.003%)	0619	0.0032	0.0000	0.0027	0.0016	0.0004	34	0.32	221.30	0
221	Acid Soluble Cu (0.003%)	0619	0.0032	0.0000	0.0027	0.0016	0.0004	34	0.32	221.99	0
221	Acid Soluble Cu (0.003%)	0559	0.0035	0.0002	0.0027	0.0016	0.0004	34	0.51	221.99	0
221	Acid Soluble Cu (0.003%)	0422	0.0035	0.0000	0.0027	0.0016	0.0004	34	0.51	221.30	0
221	Acid Soluble Cu (0.003%)	0055	0.0035	0.0030	0.0027	0.0016	0.0004	34	0.51	221.33	0
221	Acid Soluble Cu (0.003%)	0562	0.0037	0.0002	0.0027	0.0016	0.0004	34	0.63	221.99	0
221	Acid Soluble Cu (0.003%)	0600	0.0037	0.0002	0.0027	0.0016	0.0004	34	0.63	221.99	0
221	Acid Soluble Cu (0.003%)	0605	0.0045	0.0010	0.0027	0.0016	0.0004	34	1.13	221.99	0
221	Acid Soluble Cu (0.003%)	0049	0.0048	0.0058	0.0027	0.0016	0.0004	34	1.31	221.30	0
221	Acid Soluble Cu (0.003%)	0515	0.0053	0.0005	0.0027	0.0016	0.0004	34	1.59	221.33	0
221	Acid Soluble Cu (0.003%)	0452	0.0060	0.0000	0.0027	0.0016	0.0004	34	2.06	221.30	0
221	Acid Soluble Cu (0.003%)	0292	0.01000‡	0.0000	0.0027	0.0016	0.0004	34	4.54	221.32	0
221	Acid Soluble Cu (0.003%)	0291	0.02000‡	0.0000	0.0027	0.0016	0.0004	34	10.75	221.30	0
221	Acid Soluble Cu (0.003%)	0552	0.2200‡	0.0200	0.0027	0.0016	0.0004	34	134.96	221.30	1
221	Acid Soluble Cu (0.003%)	0255	0.0000	0.0000	0.0027	0.0016	0.0004	34		221.30	4
221	Acid Soluble Cu (0.003%)	0394	< 0.001		0.0027	0.0016	0.0004	34		221.33	5
221	Acid Soluble Cu (0.003%)	0009	< 0.002		0.0027	0.0016	0.0004	34		221.99	5
221	Acid Soluble Cu (0.003%)	0009	< 0.0025		0.0027	0.0016	0.0004	34		221.33	5
221	Acid Soluble Cu (0.003%)	0553	< 0.005		0.0027	0.0016	0.0004	34		221.00	5
221	Acid Soluble Cu (0.003%)	0354	< 0.01		0.0027	0.0016	0.0004	34		221.30	5
221	Acid Soluble Cu (0.003%)	0587	< 0.02		0.0027	0.0016	0.0004	34		221.99	5
221	Acid Soluble Cu (0.003%)	0117	< 5		0.0027	0.0016	0.0004	34		221.33	5
241	Acid Soluble Fe (15.6%)	0624	5.330†	0.0150	14.50	1.365	0.3581	53	-6.72	241.33	0
241	Acid Soluble Fe (15.6%)	0619	10.55†	0.1000	14.50	1.365	0.3581	53	-2.90	241.30	0
241	Acid Soluble Fe (15.6%)	0619	10.55†	0.1000	14.50	1.365	0.3581	53	-2.90	241.99	0
241	Acid Soluble Fe (15.6%)	0580	12.54†	0.0700	14.50	1.365	0.3581	53	-1.44	241.01	0
241	Acid Soluble Fe (15.6%)	0055	12.63†	0.1500	14.50	1.365	0.3581	53	-1.38	241.33	0
241	Acid Soluble Fe (15.6%)	0231	12.96†	0.0900	14.50	1.365	0.3581	53	-1.13	241.30	0
241	Acid Soluble Fe (15.6%)	0324	13.05†	1.100	14.50	1.365	0.3581	53	-1.06	241.30	0
241	Acid Soluble Fe (15.6%)	0485	13.06†	1.000	14.50	1.365	0.3581	53	-1.06	241.00	0
241	Acid Soluble Fe (15.6%)	0035	13.15†	0.5000	14.50	1.365	0.3581	53	-0.99	241.30	0
241	Acid Soluble Fe (15.6%)	0552	13.21†	0.4700	14.50	1.365	0.3581	53	-0.95	241.30	0
241	Acid Soluble Fe (15.6%)	0255	13.28†	0.4500	14.50	1.365	0.3581	53	-0.90	241.30	0
241	Acid Soluble Fe (15.6%)	0472	13.32†	0.0100	14.50	1.365	0.3581	53	-0.87	241.33	0
241	Acid Soluble Fe (15.6%)	0177	13.46†	0.1687	14.50	1.365	0.3581	53	-0.77	241.33	0
241	Acid Soluble Fe (15.6%)	0009	13.50†	1.000	14.50	1.365	0.3581	53	-0.74	241.33	0
241	Acid Soluble Fe (15.6%)	0043	13.63	0.5700	14.50	1.365	0.3581	53	-0.64	241.33	0
241	Acid Soluble Fe (15.6%)	0234	13.67	0.1500	14.50	1.365	0.3581	53	-0.61	241.30	0
241	Acid Soluble Fe (15.6%)	0220	13.72	0.8300	14.50	1.365	0.3581	53	-0.58	241.32	0
241	Acid Soluble Fe (15.6%)	0377	13.79	1.280	14.50	1.365	0.3581	53	-0.52	241.30	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
241	Acid Soluble Fe (15.6%)	0389	13.81	0.0600	14.50	1.365	0.3581	53	-0.51	241.99	0
241	Acid Soluble Fe (15.6%)	0023	13.96	0.0910	14.50	1.365	0.3581	53	-0.40	241.30	0
241	Acid Soluble Fe (15.6%)	0040	14.19	0.7200	14.50	1.365	0.3581	53	-0.23	241.00	0
241	Acid Soluble Fe (15.6%)	0027	14.24	0.8600	14.50	1.365	0.3581	53	-0.19	241.99	0
241	Acid Soluble Fe (15.6%)	0233	14.35	1.740	14.50	1.365	0.3581	53	-0.11	241.33	0
241	Acid Soluble Fe (15.6%)	0394	14.35	0.0410	14.50	1.365	0.3581	53	-0.11	241.33	0
241	Acid Soluble Fe (15.6%)	0086	14.49	1.051	14.50	1.365	0.3581	53	-0.01	241.33	0
241	Acid Soluble Fe (15.6%)	0291	14.55	0.0700	14.50	1.365	0.3581	53	0.03	241.30	0
241	Acid Soluble Fe (15.6%)	0605	14.57	0.5300	14.50	1.365	0.3581	53	0.05	241.99	0
241	Acid Soluble Fe (15.6%)	0136	14.68	0.0900	14.50	1.365	0.3581	53	0.13	241.33	0
241	Acid Soluble Fe (15.6%)	0527	14.74	0.0756	14.50	1.365	0.3581	53	0.18	241.33	0
241	Acid Soluble Fe (15.6%)	0559	14.87	0.0100	14.50	1.365	0.3581	53	0.27	241.99	0
241	Acid Soluble Fe (15.6%)	0553	15.00	0.0000	14.50	1.365	0.3581	53	0.36	241.00	0
241	Acid Soluble Fe (15.6%)	0609	15.00	0.8000	14.50	1.365	0.3581	53	0.36	241.33	0
241	Acid Soluble Fe (15.6%)	0587	15.03	0.6500	14.50	1.365	0.3581	53	0.38	241.99	0
241	Acid Soluble Fe (15.6%)	0106	15.03	0.0379	14.50	1.365	0.3581	53	0.39	241.33	0
241	Acid Soluble Fe (15.6%)	0572	15.11	0.3684	14.50	1.365	0.3581	53	0.44	241.99	0
241	Acid Soluble Fe (15.6%)	0368	15.14	0.2593	14.50	1.365	0.3581	53	0.47	241.99	0
241	Acid Soluble Fe (15.6%)	0360	15.14	0.2200	14.50	1.365	0.3581	53	0.47	241.30	0
241	Acid Soluble Fe (15.6%)	0292	15.16	0.0900	14.50	1.365	0.3581	53	0.48	241.32	0
241	Acid Soluble Fe (15.6%)	0354	15.20	0.2000	14.50	1.365	0.3581	53	0.51	241.30	0
241	Acid Soluble Fe (15.6%)	0515	15.41	0.1700	14.50	1.365	0.3581	53	0.66	241.99	0
241	Acid Soluble Fe (15.6%)	0451	15.42	0.0300	14.50	1.365	0.3581	53	0.67	241.30	0
241	Acid Soluble Fe (15.6%)	0452	15.47	0.0300	14.50	1.365	0.3581	53	0.70	241.30	0
241	Acid Soluble Fe (15.6%)	0102	15.51‡	0.0500	14.50	1.365	0.3581	53	0.73	241.33	0
241	Acid Soluble Fe (15.6%)	0494	15.59‡	0.4737	14.50	1.365	0.3581	53	0.80	241.33	0
241	Acid Soluble Fe (15.6%)	0584	15.90‡	0.2000	14.50	1.365	0.3581	53	1.02	241.99	0
241	Acid Soluble Fe (15.6%)	0543	16.09‡	1.079	14.50	1.365	0.3581	53	1.17	241.33	0
241	Acid Soluble Fe (15.6%)	0433	16.18‡	0.2900	14.50	1.365	0.3581	53	1.23	241.30	0
241	Acid Soluble Fe (15.6%)	0562	16.20‡	0.2000	14.50	1.365	0.3581	53	1.24	241.99	0
241	Acid Soluble Fe (15.6%)	0600	16.20‡	0.2000	14.50	1.365	0.3581	53	1.24	241.99	0
241	Acid Soluble Fe (15.6%)	0049	16.21‡	0.1700	14.50	1.365	0.3581	53	1.25	241.30	0
241	Acid Soluble Fe (15.6%)	0524	16.69‡	0.3937	14.50	1.365	0.3581	53	1.60	241.99	0
241	Acid Soluble Fe (15.6%)	0515	17.56‡	0.2500	14.50	1.365	0.3581	53	2.24	241.33	0
241	Acid Soluble Fe (15.6%)	0422	18.02‡	1.340	14.50	1.365	0.3581	53	2.58	241.30	0
241	Acid Soluble Fe (15.6%)	0042	12.85†	2.630	14.50	1.365	0.3581	53	-1.22	241.99	1
241	Acid Soluble Fe (15.6%)	0523	16.70‡	2.554	14.50	1.365	0.3581	53	1.61	241.99	1
251	Acid Soluble Pb (ppm)	0523	1.847	0.0740	11.16	9.339	0.8734	11	-1.00	251.30	0
251	Acid Soluble Pb (ppm)	0527	2.568	0.0616	11.16	9.339	0.8734	11	-0.92	251.33	0
251	Acid Soluble Pb (ppm)	0572	2.780	1.573	11.16	9.339	0.8734	11	-0.90	251.99	0
251	Acid Soluble Pb (ppm)	0524	3.856	0.0876	11.16	9.339	0.8734	11	-0.78	251.30	0
251	Acid Soluble Pb (ppm)	0605	6.080	0.0000	11.16	9.339	0.8734	11	-0.54	251.30	0
251	Acid Soluble Pb (ppm)	0086	9.874	0.6656	11.16	9.339	0.8734	11	-0.14	251.33	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
251	Acid Soluble Pb (ppm)	0494	16.80	0.6000	11.16	9.339	0.8734	11	0.60	251.33	0
251	Acid Soluble Pb (ppm)	0220	17.45	0.1000	11.16	9.339	0.8734	11	0.67	251.99	0
251	Acid Soluble Pb (ppm)	0220	17.65	0.3000	11.16	9.339	0.8734	11	0.69	251.32	0
251	Acid Soluble Pb (ppm)	0035	18.70	3.000	11.16	9.339	0.8734	11	0.81	251.30	0
251	Acid Soluble Pb (ppm)	0515	36.61	5.870	11.16	9.339	0.8734	11	2.72	251.33	0
251	Acid Soluble Pb (ppm)	0515	17.54	9.350	11.16	9.339	0.8734	11	0.68	251.34	1
251	Acid Soluble Pb (ppm)	0368	246.5	3.000	11.16	9.339	0.8734	11	25.20	251.34	2
251	Acid Soluble Pb (ppm)	0255	0.0000	0.0000	11.16	9.339	0.8734	11		251.30	4
251	Acid Soluble Pb (ppm)	0009	< 2.5		11.16	9.339	0.8734	11		251.99	5
251	Acid Soluble Pb (ppm)	0136	< 3		11.16	9.339	0.8734	11		251.33	5
251	Acid Soluble Pb (ppm)	0117	< 5		11.16	9.339	0.8734	11		251.33	5
251	Acid Soluble Pb (ppm)	0009	< 6		11.16	9.339	0.8734	11		251.33	5
261	Acid Soluble Mn (2.3%)	0619	1.275†	0.0900	1.615	0.1667	0.0486	53	-2.04	261.32	0
261	Acid Soluble Mn (2.3%)	0619	1.275†	0.0900	1.615	0.1667	0.0486	53	-2.04	261.99	0
261	Acid Soluble Mn (2.3%)	0394	1.381†	0.0030	1.615	0.1667	0.0486	53	-1.40	261.35	0
261	Acid Soluble Mn (2.3%)	0234	1.385†	0.1500	1.615	0.1667	0.0486	53	-1.38	261.30	0
261	Acid Soluble Mn (2.3%)	0485	1.400†	0.0400	1.615	0.1667	0.0486	53	-1.29	261.12	0
261	Acid Soluble Mn (2.3%)	0494	1.401†	0.1540	1.615	0.1667	0.0486	53	-1.28	261.35	0
261	Acid Soluble Mn (2.3%)	0086	1.406†	0.0262	1.615	0.1667	0.0486	53	-1.25	261.35	0
261	Acid Soluble Mn (2.3%)	0043	1.424†	0.0090	1.615	0.1667	0.0486	53	-1.15	261.35	0
261	Acid Soluble Mn (2.3%)	0042	1.460	0.2400	1.615	0.1667	0.0486	53	-0.93	261.99	0
261	Acid Soluble Mn (2.3%)	0009	1.500	0.0000	1.615	0.1667	0.0486	53	-0.69	261.35	0
261	Acid Soluble Mn (2.3%)	0360	1.505	0.0300	1.615	0.1667	0.0486	53	-0.66	261.31	0
261	Acid Soluble Mn (2.3%)	0055	1.505	0.0300	1.615	0.1667	0.0486	53	-0.66	261.35	0
261	Acid Soluble Mn (2.3%)	0220	1.520	0.0200	1.615	0.1667	0.0486	53	-0.57	261.32	0
261	Acid Soluble Mn (2.3%)	0106	1.528	0.0316	1.615	0.1667	0.0486	53	-0.52	261.35	0
261	Acid Soluble Mn (2.3%)	0177	1.536	0.0433	1.615	0.1667	0.0486	53	-0.47	261.35	0
261	Acid Soluble Mn (2.3%)	0605	1.555	0.1100	1.615	0.1667	0.0486	53	-0.36	261.99	0
261	Acid Soluble Mn (2.3%)	0255	1.559	0.0110	1.615	0.1667	0.0486	53	-0.34	261.99	0
261	Acid Soluble Mn (2.3%)	0389	1.560	0.0000	1.615	0.1667	0.0486	53	-0.33	261.99	0
261	Acid Soluble Mn (2.3%)	0324	1.565	0.0900	1.615	0.1667	0.0486	53	-0.30	261.31	0
261	Acid Soluble Mn (2.3%)	0472	1.565	0.0100	1.615	0.1667	0.0486	53	-0.30	261.35	0
261	Acid Soluble Mn (2.3%)	0368	1.568	0.0271	1.615	0.1667	0.0486	53	-0.28	261.99	0
261	Acid Soluble Mn (2.3%)	0580	1.570	0.0400	1.615	0.1667	0.0486	53	-0.27	261.13	0
261	Acid Soluble Mn (2.3%)	0291	1.575	0.0100	1.615	0.1667	0.0486	53	-0.24	261.30	0
261	Acid Soluble Mn (2.3%)	0049	1.586	0.2400	1.615	0.1667	0.0486	53	-0.17	261.32	0
261	Acid Soluble Mn (2.3%)	0035	1.595	0.0500	1.615	0.1667	0.0486	53	-0.12	261.30	0
261	Acid Soluble Mn (2.3%)	0292	1.600	0.0000	1.615	0.1667	0.0486	53	-0.09	261.14	0
261	Acid Soluble Mn (2.3%)	0233	1.610	0.0840	1.615	0.1667	0.0486	53	-0.03	261.35	0
261	Acid Soluble Mn (2.3%)	0624	1.614	0.0070	1.615	0.1667	0.0486	53	-0.01	261.35	0
261	Acid Soluble Mn (2.3%)	0354	1.620	0.0600	1.615	0.1667	0.0486	53	0.03	261.30	0
261	Acid Soluble Mn (2.3%)	0136	1.620	0.0000	1.615	0.1667	0.0486	53	0.03	261.35	0
261	Acid Soluble Mn (2.3%)	0587	1.625	0.0300	1.615	0.1667	0.0486	53	0.06	261.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
261	Acid Soluble Mn (2.3%)	0040	1.626	0.0560	1.615	0.1667	0.0486	53	0.07	261.12	0
261	Acid Soluble Mn (2.3%)	0231	1.630	0.0000	1.615	0.1667	0.0486	53	0.09	261.32	0
261	Acid Soluble Mn (2.3%)	0543	1.636	0.1100	1.615	0.1667	0.0486	53	0.13	261.35	0
261	Acid Soluble Mn (2.3%)	0527	1.643	0.0306	1.615	0.1667	0.0486	53	0.17	261.35	0
261	Acid Soluble Mn (2.3%)	0023	1.644	0.0100	1.615	0.1667	0.0486	53	0.18	261.32	0
261	Acid Soluble Mn (2.3%)	0609	1.650	0.0200	1.615	0.1667	0.0486	53	0.21	261.35	0
261	Acid Soluble Mn (2.3%)	0562	1.650	0.1000	1.615	0.1667	0.0486	53	0.21	261.99	0
261	Acid Soluble Mn (2.3%)	0600	1.650	0.1000	1.615	0.1667	0.0486	53	0.21	261.99	0
261	Acid Soluble Mn (2.3%)	0433	1.687	0.0140	1.615	0.1667	0.0486	53	0.43	261.30	0
261	Acid Soluble Mn (2.3%)	0572	1.719	0.0418	1.615	0.1667	0.0486	53	0.62	261.99	0
261	Acid Soluble Mn (2.3%)	0029	1.748	0.0630	1.615	0.1667	0.0486	53	0.80	261.12	0
261	Acid Soluble Mn (2.3%)	0377	1.750	0.0600	1.615	0.1667	0.0486	53	0.81	261.32	0
261	Acid Soluble Mn (2.3%)	0552	1.755	0.0300	1.615	0.1667	0.0486	53	0.84	261.32	0
261	Acid Soluble Mn (2.3%)	0524	1.834‡	0.0473	1.615	0.1667	0.0486	53	1.32	261.99	0
261	Acid Soluble Mn (2.3%)	0422	1.848‡	0.0050	1.615	0.1667	0.0486	53	1.40	261.30	0
261	Acid Soluble Mn (2.3%)	0452	1.855‡	0.0100	1.615	0.1667	0.0486	53	1.44	261.30	0
261	Acid Soluble Mn (2.3%)	0523	1.922‡	0.0210	1.615	0.1667	0.0486	53	1.84	261.99	0
261	Acid Soluble Mn (2.3%)	0553	1.980‡	0.0400	1.615	0.1667	0.0486	53	2.19	261.00	0
261	Acid Soluble Mn (2.3%)	0559	2.070‡	0.0200	1.615	0.1667	0.0486	53	2.73	261.99	0
261	Acid Soluble Mn (2.3%)	0515	2.174‡	0.1640	1.615	0.1667	0.0486	53	3.36	261.35	0
261	Acid Soluble Mn (2.3%)	0451	2.190‡	0.0420	1.615	0.1667	0.0486	53	3.45	261.32	0
261	Acid Soluble Mn (2.3%)	0515	2.298‡	0.0170	1.615	0.1667	0.0486	53	4.10	261.99	0
261	Acid Soluble Mn (2.3%)	0027	77.29‡	151.4	1.615	0.1667	0.0486	53	454.01	261.99	1
281	Acid Soluble Hg (ppm)	0524	0.0028	0.0021	0.0102	0.0076	0.0000	3	-0.80	281.99	0
281	Acid Soluble Hg (ppm)	0605	0.0100	0.0000	0.0102	0.0076	0.0000	3	-0.02	281.30	0
281	Acid Soluble Hg (ppm)	0572	0.0179	0.0145	0.0102	0.0076	0.0000	3	0.82	281.99	0
281	Acid Soluble Hg (ppm)	0527	< 0.001		0.0102	0.0076	0.0000	3		281.30	5
281	Acid Soluble Hg (ppm)	0009	< 0.044		0.0102	0.0076	0.0000	3		281.99	5
281	Acid Soluble Hg (ppm)	0515	< 0.1		0.0102	0.0076	0.0000	3		281.30	5
289	Acid Soluble Mo (ppm)	0255	14.09	0.4700	28.20	13.73	4.012	14	-1.03	289.30	0
289	Acid Soluble Mo (ppm)	0086	14.21	19.15	28.20	13.73	4.012	14	-1.02	289.33	0
289	Acid Soluble Mo (ppm)	0368	16.40	0.2000	28.20	13.73	4.012	14	-0.86	289.34	0
289	Acid Soluble Mo (ppm)	0515	17.59	1.990	28.20	13.73	4.012	14	-0.77	289.34	0
289	Acid Soluble Mo (ppm)	0136	21.70	0.3400	28.20	13.73	4.012	14	-0.47	289.33	0
289	Acid Soluble Mo (ppm)	0234	23.00	0.0000	28.20	13.73	4.012	14	-0.38	289.30	0
289	Acid Soluble Mo (ppm)	0117	25.10	3.210	28.20	13.73	4.012	14	-0.23	289.33	0
289	Acid Soluble Mo (ppm)	0220	26.85	0.3000	28.20	13.73	4.012	14	-0.10	289.32	0
289	Acid Soluble Mo (ppm)	0572	27.93	3.350	28.20	13.73	4.012	14	-0.02	289.99	0
289	Acid Soluble Mo (ppm)	0527	31.79	0.0986	28.20	13.73	4.012	14	0.26	289.33	0
289	Acid Soluble Mo (ppm)	0515	33.13	9.680	28.20	13.73	4.012	14	0.36	289.33	0
289	Acid Soluble Mo (ppm)	0106	47.00	24.00	28.20	13.73	4.012	14	1.37	289.33	0
289	Acid Soluble Mo (ppm)	0524	47.27	0.4551	28.20	13.73	4.012	14	1.39	289.30	0
289	Acid Soluble Mo (ppm)	0494	65.75	8.100	28.20	13.73	4.012	14	2.73	289.33	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
291	Acid Soluble Ni (ppm)	0035	53.20	12.40	110.0	35.82	6.920	18	-1.59	291.30	0
291	Acid Soluble Ni (ppm)	0394	58.38	4.847	110.0	35.82	6.920	18	-1.44	291.30	0
291	Acid Soluble Ni (ppm)	0368	72.75	13.50	110.0	35.82	6.920	18	-1.04	291.34	0
291	Acid Soluble Ni (ppm)	0624	77.65	3.240	110.0	35.82	6.920	18	-0.90	291.33	0
291	Acid Soluble Ni (ppm)	0572	87.93	20.47	110.0	35.82	6.920	18	-0.62	291.99	0
291	Acid Soluble Ni (ppm)	0136	94.28	7.180	110.0	35.82	6.920	18	-0.44	291.33	0
291	Acid Soluble Ni (ppm)	0515	96.06	8.280	110.0	35.82	6.920	18	-0.39	291.34	0
291	Acid Soluble Ni (ppm)	0255	100.4	3.580	110.0	35.82	6.920	18	-0.27	291.99	0
291	Acid Soluble Ni (ppm)	0086	114.7	0.0615	110.0	35.82	6.920	18	0.13	291.33	0
291	Acid Soluble Ni (ppm)	0515	117.8	7.800	110.0	35.82	6.920	18	0.22	291.33	0
291	Acid Soluble Ni (ppm)	0117	120.6	3.909	110.0	35.82	6.920	18	0.30	291.33	0
291	Acid Soluble Ni (ppm)	0220	123.0	4.000	110.0	35.82	6.920	18	0.36	291.32	0
291	Acid Soluble Ni (ppm)	0220	129.5	23.00	110.0	35.82	6.920	18	0.54	291.99	0
291	Acid Soluble Ni (ppm)	0009	135.0	10.00	110.0	35.82	6.920	18	0.70	291.33	0
291	Acid Soluble Ni (ppm)	0009	135.0	10.00	110.0	35.82	6.920	18	0.70	291.99	0
291	Acid Soluble Ni (ppm)	0523	140.1	0.8520	110.0	35.82	6.920	18	0.84	291.30	0
291	Acid Soluble Ni (ppm)	0527	156.6	2.746	110.0	35.82	6.920	18	1.30	291.33	0
291	Acid Soluble Ni (ppm)	0524	309.1	1.601	110.0	35.82	6.920	18	5.56	291.30	0
301	Acid Soluble Se (ppm)	0524	1.924	0.1143	4.583	0.9442	0.3006	8	-2.82	301.30	0
301	Acid Soluble Se (ppm)	0523	4.010	0.0770	4.583	0.9442	0.3006	8	-0.61	301.30	0
301	Acid Soluble Se (ppm)	0009	4.400	0.6000	4.583	0.9442	0.3006	8	-0.19	301.99	0
301	Acid Soluble Se (ppm)	0572	4.433	0.5529	4.583	0.9442	0.3006	8	-0.16	301.99	0
301	Acid Soluble Se (ppm)	0605	4.630	0.0000	4.583	0.9442	0.3006	8	0.05	301.30	0
301	Acid Soluble Se (ppm)	0515	4.726	0.2600	4.583	0.9442	0.3006	8	0.15	301.34	0
301	Acid Soluble Se (ppm)	0220	5.300	0.4000	4.583	0.9442	0.3006	8	0.76	301.32	0
301	Acid Soluble Se (ppm)	0220	6.150	0.1000	4.583	0.9442	0.3006	8	1.66	301.99	0
301	Acid Soluble Se (ppm)	0515	70.77	29.77	4.583	0.9442	0.3006	8	70.09	301.33	1
301	Acid Soluble Se (ppm)	0255	0.0000	0.0000	4.583	0.9442	0.3006	8		301.99	4
301	Acid Soluble Se (ppm)	0527	< 0.01		4.583	0.9442	0.3006	8		301.33	5
301	Acid Soluble Se (ppm)	0368	< 1		4.583	0.9442	0.3006	8		301.34	5
301	Acid Soluble Se (ppm)	0117	< 5		4.583	0.9442	0.3006	8		301.33	5
301	Acid Soluble Se (ppm)	0009	< 22		4.583	0.9442	0.3006	8		301.33	5
311	Sodium (%)	0572	0.0772	0.0059	0.1002	0.0086	0.0049	9	-2.48	311.99	0
311	Sodium (%)	0494	0.0925	0.0026	0.1002	0.0086	0.0049	9	-0.83	311.33	0
311	Sodium (%)	0624	0.0948	0.0077	0.1002	0.0086	0.0049	9	-0.59	311.33	0
311	Sodium (%)	0553	0.0990	0.0060	0.1002	0.0086	0.0049	9	-0.13	311.00	0
311	Sodium (%)	0452	0.1000	0.0000	0.1002	0.0086	0.0049	9	-0.02	311.33	0
311	Sodium (%)	0354	0.1050	0.0100	0.1002	0.0086	0.0049	9	0.52	311.99	0
311	Sodium (%)	0035	0.1065	0.0010	0.1002	0.0086	0.0049	9	0.68	311.33	0
311	Sodium (%)	0527	0.1068	0.0009	0.1002	0.0086	0.0049	9	0.70	311.33	0
311	Sodium (%)	0009	0.1100	0.0000	0.1002	0.0086	0.0049	9	1.05	311.33	0
321	Acid Soluble Zn (%)	0255	0.0040	0.0000	0.0086	0.0019	0.0006	26	-2.34	321.30	0
321	Acid Soluble Zn (%)	0106	0.0061	0.0009	0.0086	0.0019	0.0006	26	-1.29	321.33	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
321	Acid Soluble Zn (%)	0035	0.0064	0.0001	0.0086	0.0019	0.0006	26	-1.13	321.30	0
321	Acid Soluble Zn (%)	0368	0.0066	0.0001	0.0086	0.0019	0.0006	26	-1.03	321.99	0
321	Acid Soluble Zn (%)	0220	0.0067	0.0003	0.0086	0.0019	0.0006	26	-0.98	321.99	0
321	Acid Soluble Zn (%)	0494	0.0068	0.0001	0.0086	0.0019	0.0006	26	-0.93	321.33	0
321	Acid Soluble Zn (%)	0572	0.0071	0.0011	0.0086	0.0019	0.0006	26	-0.77	321.99	0
321	Acid Soluble Zn (%)	0515	0.0073	0.0011	0.0086	0.0019	0.0006	26	-0.67	321.33	0
321	Acid Soluble Zn (%)	0515	0.0075	0.0013	0.0086	0.0019	0.0006	26	-0.57	321.99	0
321	Acid Soluble Zn (%)	0027	0.0075	0.0010	0.0086	0.0019	0.0006	26	-0.54	321.99	0
321	Acid Soluble Zn (%)	0220	0.0076	0.0001	0.0086	0.0019	0.0006	26	-0.52	321.32	0
321	Acid Soluble Zn (%)	0527	0.0084	0.0001	0.0086	0.0019	0.0006	26	-0.10	321.33	0
321	Acid Soluble Zn (%)	0394	0.0088	0.0007	0.0086	0.0019	0.0006	26	0.10	321.32	0
321	Acid Soluble Zn (%)	0086	0.0089	0.0001	0.0086	0.0019	0.0006	26	0.15	321.33	0
321	Acid Soluble Zn (%)	0609	0.0093	0.0005	0.0086	0.0019	0.0006	26	0.36	321.33	0
321	Acid Soluble Zn (%)	0524	0.0095	0.0005	0.0086	0.0019	0.0006	26	0.46	321.99	0
321	Acid Soluble Zn (%)	0553	0.0096	0.0002	0.0086	0.0019	0.0006	26	0.54	321.00	0
321	Acid Soluble Zn (%)	0452	0.0097	0.0001	0.0086	0.0019	0.0006	26	0.56	321.30	0
321	Acid Soluble Zn (%)	0049	0.0100	0.0000	0.0086	0.0019	0.0006	26	0.74	321.30	0
321	Acid Soluble Zn (%)	0354	0.0100	0.0000	0.0086	0.0019	0.0006	26	0.74	321.30	0
321	Acid Soluble Zn (%)	0136	0.0100	0.0000	0.0086	0.0019	0.0006	26	0.74	321.33	0
321	Acid Soluble Zn (%)	0472	0.0100	0.0000	0.0086	0.0019	0.0006	26	0.74	321.33	0
321	Acid Soluble Zn (%)	0422	0.0101	0.0012	0.0086	0.0019	0.0006	26	0.80	321.30	0
321	Acid Soluble Zn (%)	0624	0.0108	0.0027	0.0086	0.0019	0.0006	26	1.13	321.33	0
321	Acid Soluble Zn (%)	0117	0.0114	0.0003	0.0086	0.0019	0.0006	26	1.44	321.33	0
321	Acid Soluble Zn (%)	0523	0.0170	0.0000	0.0086	0.0019	0.0006	26	4.35	321.99	0
321	Acid Soluble Zn (%)	0552	0.4350	0.2100	0.0086	0.0019	0.0006	26	219.36	321.30	1
431	Soluble Si in nonliquids (4%)	0220	0.5000	0.0000	2.072	1.735	0.0000	4	-0.91	431.10	0
431	Soluble Si in nonliquids (4%)	0136	0.6500	0.0000	2.072	1.735	0.0000	4	-0.82	431.10	0
431	Soluble Si in nonliquids (4%)	0624	3.392	0.0000	2.072	1.735	0.0000	4	0.76	431.99	0
431	Soluble Si in nonliquids (4%)	0452	3.745	0.0100	2.072	1.735	0.0000	4	0.96	431.99	0

Interpreting Z Scores and Flags:

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

Notes:

Robust statistics not used if < 6 labs used in calculations, in this case Values and Z Scores are grayed out and should be interpreted with extreme caution. Your offset values are higher (‡) or lower (†) than the Robust Analyte value ± Investigational Allowance. Analyte codes in light green indicate a guaranteed analyte. Individual lab values may be below detection limits but are reported solely for the purpose of this Proficiency Testing program.