

Analyte PT For All Labs

Sample # 250714

19-19-19

Magruder Fertilizer Proficiency Testing Program

Regular PT Scheme Sample Doubles with P Scheme

Statistical Summary

Analytes: 34

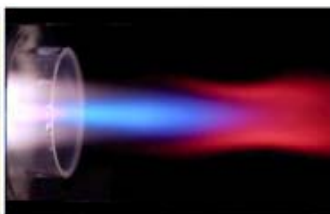
Labs Reporting: 77

Issue Date : 08/31/2025

Analyte Code	Analyte Sample # 250714	# 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 (%)	26	25	3.880	0.9501	3.791		0.4987	0.1247	13.16%		0.0701	3.27%
005	Urea N (%)	15	15	14.18	2.036	13.98		1.607	0.5186	11.50%		0.1900	2.67%
007	Urea (%)	1		13.30									
010	Total N (19%)	61	60	17.06	0.8469	16.88	0.6832	0.5539	0.0894	3.28%	1.89	0.1568	2.43%
020	Total P2O5 (%)	45	43	15.90	2.471	16.05		0.9137	0.1742	5.69%		0.1885	2.50%
030	Citrate Insoluble P2O5 (%)	6	6	0.0800	0.0348	0.0800		0.0394	0.0201	49.31%		0.0167	5.85%
040	Indirect Available P2O5 (19%)	4	4	15.57	0.2840	15.57	0.7000	0.2840	0.1775	1.82%	0.95	0.1463	2.53%
041	Direct Available P2O5 (19%)	39	38	15.86	1.103	15.67	0.7000	0.7194	0.1459	4.59%	2.39	0.1643	2.53%
042	Water Soluble OrthoP As P2O5 (%)	1		19.13									
048	Water Soluble P2O5 (%)	9	9	14.17	0.5434	14.19		0.5765	0.2402	4.06%		0.0544	2.65%
050	Soluble K2O (19%)	75	72	23.49	3.338	23.93	1.2079	2.167	0.3192	9.06%	4.18	0.2998	2.04%
060	Water (Free) (%)	4	4	1.092	0.2857	1.092		0.2857	0.1786	26.15%		0.0375	3.95%
101	Acid Soluble Ca (%)	10	8	0.1642	0.1300	0.1415	0.2071	0.0456	0.0202	32.24%	0.51	0.0130	5.37%
121	Acid Soluble Mg (%)	16	15	0.4471	0.1089	0.4219	0.2211	0.0584	0.0189	13.85%	0.62	0.0123	4.55%
145	Sulfate S, HCl soluble (%)	1		0.5725									
148	Total S (%)	6	5	0.4307	0.1696	0.4968	0.2248	0.0563	0.0314	11.32%	0.58	0.0344	4.44%
149	S - HNO3 soluble (%)	1		0.5206									
151	Acid Soluble As (ppm)	17	7	2.954	4.657	0.5832		0.1074	0.0507	18.41%		0.0722	17.35%
165	Acid Soluble B (%)	8	5	0.0061	0.0052	0.0077	0.0042	0.0048	0.0027	63.05%	2.72	0.0067	8.32%
181	Acid Soluble Cd (ppm)	21	19	15.48	4.617	16.68		1.895	0.5433	11.36%		0.5805	10.47%
190	Water Soluble Cl (%)	1		18.52									
191	Acid Soluble Cr (ppm)	20	20	98.53	11.46	98.53		12.01	3.357	12.19%		2.943	8.02%
202	Acid Soluble Co (ppm)	16	8	2.476	3.421	0.7213	1.2164	0.3526	0.1558	48.88%	0.68	0.0776	16.80%
221	Acid Soluble Cu (%)	18	7	0.5569	2.357	0.0018	0.0052	0.0016	0.0008	93.24%	0.74	0.0003	10.39%
241	Acid Soluble Fe (%)	15	15	0.3284	0.1270	0.3445	0.0395	0.0754	0.0243	21.87%	4.45	0.0092	4.70%
251	Acid Soluble Pb (ppm)	19	8	2.880	3.492	1.894		2.709	1.197	143.02%		0.4288	14.53%
261	Acid Soluble Mn (%)	10	6	0.0061	0.0034	0.0068	0.0057	0.0003	0.0002	4.77%	0.13	0.0001	8.47%
281	Acid Soluble Hg (ppm)	9	1	0.4357	0.7174	0.0068		0.0003	0.0004	4.77%		0.0000	22.00%
289	Acid Soluble Mo (ppm)	16	15	4.226	3.112	3.625	2.0874	1.013	0.3269	27.95%	1.13	0.2500	13.18%

Analyte Code	Analyte Sample # 250714	# 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
291	Acid Soluble Ni (ppm)	21	19	14.21	4.995	13.16		2.195	0.6296	16.68%		0.4905	10.85%
301	Acid Soluble Se (ppm)	13	6	4.722	8.827	0.2930		0.3126	0.1595	106.67%		0.1158	19.24%
311	Sodium (%)	8	8	0.5902	0.0508	0.5900	0.0640	0.0572	0.0253	9.69%	2.08	0.0208	4.33%
321	Acid Soluble Zn (%)	30	28	0.0212	0.0073	0.0220	0.0072	0.0023	0.0006	10.60%	0.75	0.0008	7.10%
325	Water Soluble Zn (%)	1		0.0199									

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: 34

Sample # 250714

Regular PT Scheme Sample Doubles with P Scheme

Labs Reporting: 77

19-19-19

Lab Values

Issue Date : 08/31/2025

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
001	Ammoniacal N (%)	0231	2.555	0.2300	3.791	0.4987	0.0701	25	-2.48	001.99	0
001	Ammoniacal N (%)	0368	3.107	0.0290	3.791	0.4987	0.0701	25	-1.37	001.99	0
001	Ammoniacal N (%)	0394	3.132	0.0400	3.791	0.4987	0.0701	25	-1.32	001.99	0
001	Ammoniacal N (%)	0472	3.450	0.1000	3.791	0.4987	0.0701	25	-0.68	001.99	0
001	Ammoniacal N (%)	0582	3.479	0.0060	3.791	0.4987	0.0701	25	-0.62	001.99	0
001	Ammoniacal N (%)	0231	3.510	0.1200	3.791	0.4987	0.0701	25	-0.56	001.10	0
001	Ammoniacal N (%)	0389	3.510	0.0200	3.791	0.4987	0.0701	25	-0.56	001.10	0
001	Ammoniacal N (%)	0027	3.578	0.0870	3.791	0.4987	0.0701	25	-0.43	001.10	0
001	Ammoniacal N (%)	0593	3.580	0.0900	3.791	0.4987	0.0701	25	-0.42	001.99	0
001	Ammoniacal N (%)	0581	3.590	0.0200	3.791	0.4987	0.0701	25	-0.40	001.99	0
001	Ammoniacal N (%)	0136	3.600	0.2000	3.791	0.4987	0.0701	25	-0.38	001.99	0
001	Ammoniacal N (%)	0605	3.650	0.0200	3.791	0.4987	0.0701	25	-0.28	001.99	0
001	Ammoniacal N (%)	0096	3.665	0.0100	3.791	0.4987	0.0701	25	-0.25	001.99	0
001	Ammoniacal N (%)	0510	3.676	0.0273	3.791	0.4987	0.0701	25	-0.23	001.99	0
001	Ammoniacal N (%)	0498	3.800	0.0000	3.791	0.4987	0.0701	25	0.02	001.10	0
001	Ammoniacal N (%)	0553	3.875	0.0100	3.791	0.4987	0.0701	25	0.17	001.99	0
001	Ammoniacal N (%)	0647	3.930	0.0400	3.791	0.4987	0.0701	25	0.28	001.99	0
001	Ammoniacal N (%)	0423	4.015	0.0700	3.791	0.4987	0.0701	25	0.45	001.99	0
001	Ammoniacal N (%)	0536	4.085	0.0700	3.791	0.4987	0.0701	25	0.59	001.99	0
001	Ammoniacal N (%)	0600	4.250	0.1000	3.791	0.4987	0.0701	25	0.92	001.99	0
001	Ammoniacal N (%)	0220	4.300	0.0800	3.791	0.4987	0.0701	25	1.02	001.99	0
001	Ammoniacal N (%)	0548	4.340	0.1400	3.791	0.4987	0.0701	25	1.10	001.99	0
001	Ammoniacal N (%)	0405	4.525	0.1100	3.791	0.4987	0.0701	25	1.47	001.99	0
001	Ammoniacal N (%)	0545	5.190	0.0200	3.791	0.4987	0.0701	25	2.81	001.99	0
001	Ammoniacal N (%)	0117	7.705	0.6100	3.791	0.4987	0.0701	25	7.85	001.10	0
001	Ammoniacal N (%)	0524	2.787	1.278	3.791	0.4987	0.0701	25	-2.01	001.99	1
005	Urea N (%)	0545	11.11	0.1800	13.98	1.607	0.1900	15	-1.78	005.99	0
005	Urea N (%)	0524	12.26	0.7008	13.98	1.607	0.1900	15	-1.07	005.99	0
005	Urea N (%)	0136	12.40	0.2000	13.98	1.607	0.1900	15	-0.98	005.00	0
005	Urea N (%)	0029	13.12	0.1600	13.98	1.607	0.1900	15	-0.53	005.99	0
005	Urea N (%)	0027	13.18	0.2500	13.98	1.607	0.1900	15	-0.50	005.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
005	Urea N (%)	0394	13.38	0.0320	13.98	1.607	0.1900	15	-0.37	005.10	0
005	Urea N (%)	0368	13.40	0.1701	13.98	1.607	0.1900	15	-0.36	005.00	0
005	Urea N (%)	0605	14.06	0.1700	13.98	1.607	0.1900	15	0.05	005.99	0
005	Urea N (%)	0405	14.12	0.0000	13.98	1.607	0.1900	15	0.09	005.99	0
005	Urea N (%)	0548	14.65	0.3000	13.98	1.607	0.1900	15	0.42	005.99	0
005	Urea N (%)	0647	14.77	0.1500	13.98	1.607	0.1900	15	0.49	005.99	0
005	Urea N (%)	0536	14.83	0.0900	13.98	1.607	0.1900	15	0.53	005.99	0
005	Urea N (%)	0600	15.15	0.1000	13.98	1.607	0.1900	15	0.73	005.99	0
005	Urea N (%)	0389	16.56	0.1600	13.98	1.607	0.1900	15	1.61	005.00	0
005	Urea N (%)	0638	19.73	0.4000	13.98	1.607	0.1900	15	3.58	005.99	0
007	Urea (%)	0220	13.30	0.0800				1		007.20	0
010	Total N (19%)	0586	16.20†	0.2300	16.88	0.5539	0.1568	60	-1.24	010.60	0
010	Total N (19%)	0527	16.20	0.6020	16.88	0.5539	0.1568	60	-1.23	010.60	0
010	Total N (19%)	0102	16.21	0.0800	16.88	0.5539	0.1568	60	-1.21	010.60	0
010	Total N (19%)	0043	16.23	0.2600	16.88	0.5539	0.1568	60	-1.18	010.60	0
010	Total N (19%)	0421	16.25	0.2700	16.88	0.5539	0.1568	60	-1.15	010.60	0
010	Total N (19%)	0177	16.29	0.5180	16.88	0.5539	0.1568	60	-1.08	010.60	0
010	Total N (19%)	0545	16.30	0.2000	16.88	0.5539	0.1568	60	-1.05	010.99	0
010	Total N (19%)	0524	16.39	0.1037	16.88	0.5539	0.1568	60	-0.89	010.99	0
010	Total N (19%)	0602	16.40	0.2000	16.88	0.5539	0.1568	60	-0.87	010.12	0
010	Total N (19%)	0602	16.40	0.2000	16.88	0.5539	0.1568	60	-0.87	010.99	0
010	Total N (19%)	0131	16.43	0.1010	16.88	0.5539	0.1568	60	-0.81	010.60	0
010	Total N (19%)	0360	16.44	0.6500	16.88	0.5539	0.1568	60	-0.81	010.60	0
010	Total N (19%)	0324	16.50	0.0000	16.88	0.5539	0.1568	60	-0.69	010.60	0
010	Total N (19%)	0049	16.52	0.1800	16.88	0.5539	0.1568	60	-0.65	010.60	0
010	Total N (19%)	0452	16.52	0.0200	16.88	0.5539	0.1568	60	-0.65	010.60	0
010	Total N (19%)	0561	16.53	0.0700	16.88	0.5539	0.1568	60	-0.65	010.60	0
010	Total N (19%)	0389	16.58	0.0700	16.88	0.5539	0.1568	60	-0.56	010.60	0
010	Total N (19%)	0402	16.59	0.1270	16.88	0.5539	0.1568	60	-0.54	010.60	0
010	Total N (19%)	0117	16.60	0.4000	16.88	0.5539	0.1568	60	-0.51	010.12	0
010	Total N (19%)	0231	16.60	0.0800	16.88	0.5539	0.1568	60	-0.51	010.60	0
010	Total N (19%)	0027	16.62	0.1300	16.88	0.5539	0.1568	60	-0.48	010.60	0
010	Total N (19%)	0292	16.62	0.0900	16.88	0.5539	0.1568	60	-0.48	010.60	0
010	Total N (19%)	0513	16.62	0.0300	16.88	0.5539	0.1568	60	-0.48	010.99	0
010	Total N (19%)	0040	16.65	0.1000	16.88	0.5539	0.1568	60	-0.42	010.60	0
010	Total N (19%)	0055	16.66	0.0200	16.88	0.5539	0.1568	60	-0.41	010.60	0
010	Total N (19%)	0521	16.66	0.0000	16.88	0.5539	0.1568	60	-0.40	010.60	0
010	Total N (19%)	0494	16.66	0.1200	16.88	0.5539	0.1568	60	-0.40	010.60	0
010	Total N (19%)	0422	16.67	0.0900	16.88	0.5539	0.1568	60	-0.39	010.60	0
010	Total N (19%)	0136	16.70	0.2000	16.88	0.5539	0.1568	60	-0.33	010.60	0
010	Total N (19%)	0260	16.72	0.5800	16.88	0.5539	0.1568	60	-0.29	010.60	0
010	Total N (19%)	0405	16.74	0.0100	16.88	0.5539	0.1568	60	-0.27	010.60	0
010	Total N (19%)	0220	16.77	0.0900	16.88	0.5539	0.1568	60	-0.21	010.60	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
010	Total N (19%)	0234	16.77	0.2600	16.88	0.5539	0.1568	60	-0.20	010.60	0
010	Total N (19%)	0368	16.78	0.1590	16.88	0.5539	0.1568	60	-0.19	010.60	0
010	Total N (19%)	0095	16.80	0.1300	16.88	0.5539	0.1568	60	-0.16	010.60	0
010	Total N (19%)	0023	16.83	0.1480	16.88	0.5539	0.1568	60	-0.10	010.60	0
010	Total N (19%)	0543	16.84	0.0500	16.88	0.5539	0.1568	60	-0.09	010.60	0
010	Total N (19%)	0291	16.92	0.0100	16.88	0.5539	0.1568	60	0.06	010.60	0
010	Total N (19%)	0542	16.93	0.1600	16.88	0.5539	0.1568	60	0.09	010.60	0
010	Total N (19%)	0035	17.10	0.2000	16.88	0.5539	0.1568	60	0.39	010.60	0
010	Total N (19%)	0034	17.11	0.3000	16.88	0.5539	0.1568	60	0.41	010.60	0
010	Total N (19%)	0510	17.14	0.0170	16.88	0.5539	0.1568	60	0.47	010.11	0
010	Total N (19%)	0354	17.20	0.0000	16.88	0.5539	0.1568	60	0.57	010.60	0
010	Total N (19%)	0025	17.21	0.1100	16.88	0.5539	0.1568	60	0.58	010.60	0
010	Total N (19%)	0612	17.23	0.5800	16.88	0.5539	0.1568	60	0.63	010.60	0
010	Total N (19%)	0029	17.25	0.4200	16.88	0.5539	0.1568	60	0.66	010.60	0
010	Total N (19%)	0169	17.29	0.0800	16.88	0.5539	0.1568	60	0.74	010.60	0
010	Total N (19%)	0582	17.32	0.0700	16.88	0.5539	0.1568	60	0.78	010.60	0
010	Total N (19%)	0377	17.40	0.0300	16.88	0.5539	0.1568	60	0.93	010.60	0
010	Total N (19%)	0472	17.54	0.0300	16.88	0.5539	0.1568	60	1.18	010.60	0
010	Total N (19%)	0605	17.71‡	0.1800	16.88	0.5539	0.1568	60	1.49	010.99	0
010	Total N (19%)	0624	17.83‡	0.0770	16.88	0.5539	0.1568	60	1.72	010.60	0
010	Total N (19%)	0498	18.45‡	0.1000	16.88	0.5539	0.1568	60	2.83	010.12	0
010	Total N (19%)	0371	18.72‡	0.3400	16.88	0.5539	0.1568	60	3.32	010.60	0
010	Total N (19%)	0423	18.78‡	0.0300	16.88	0.5539	0.1568	60	3.42	010.60	0
010	Total N (19%)	0534	18.80‡	0.2000	16.88	0.5539	0.1568	60	3.46	010.60	0
010	Total N (19%)	0577	19.02‡	0.3700	16.88	0.5539	0.1568	60	3.85	010.99	0
010	Total N (19%)	0600	19.15‡	0.1000	16.88	0.5539	0.1568	60	4.09	010.99	0
010	Total N (19%)	0584	19.32‡	0.2700	16.88	0.5539	0.1568	60	4.39	010.99	0
010	Total N (19%)	0558	19.55‡	0.1000	16.88	0.5539	0.1568	60	4.82	010.99	0
010	Total N (19%)	0255	17.48	0.7940	16.88	0.5539	0.1568	60	1.08	010.60	1
020	Total P2O5 (%)	0543	14.58	0.0390	16.05	0.9137	0.1885	43	-1.61	020.50	0
020	Total P2O5 (%)	0394	14.72	0.3700	16.05	0.9137	0.1885	43	-1.45	020.20	0
020	Total P2O5 (%)	0510	14.87	0.0382	16.05	0.9137	0.1885	43	-1.29	020.20	0
020	Total P2O5 (%)	0472	14.91	0.1200	16.05	0.9137	0.1885	43	-1.24	020.50	0
020	Total P2O5 (%)	0035	15.00	0.4000	16.05	0.9137	0.1885	43	-1.15	020.40	0
020	Total P2O5 (%)	0169	15.05	0.0900	16.05	0.9137	0.1885	43	-1.10	020.50	0
020	Total P2O5 (%)	0169	15.25	0.0500	16.05	0.9137	0.1885	43	-0.88	020.20	0
020	Total P2O5 (%)	0405	15.35	0.0100	16.05	0.9137	0.1885	43	-0.77	020.20	0
020	Total P2O5 (%)	0389	15.35	0.3000	16.05	0.9137	0.1885	43	-0.76	020.50	0
020	Total P2O5 (%)	0582	15.43	0.0640	16.05	0.9137	0.1885	43	-0.67	020.20	0
020	Total P2O5 (%)	0521	15.49	0.0000	16.05	0.9137	0.1885	43	-0.61	020.50	0
020	Total P2O5 (%)	0586	15.54	0.0500	16.05	0.9137	0.1885	43	-0.56	020.40	0
020	Total P2O5 (%)	0581	15.54	0.0400	16.05	0.9137	0.1885	43	-0.55	020.20	0
020	Total P2O5 (%)	0582	15.58	0.1070	16.05	0.9137	0.1885	43	-0.51	020.50	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
020	Total P2O5 (%)	0096	15.65	0.4300	16.05	0.9137	0.1885	43	-0.44	020.40	0
020	Total P2O5 (%)	0291	15.70	0.0100	16.05	0.9137	0.1885	43	-0.38	020.50	0
020	Total P2O5 (%)	0433	15.70	0.0900	16.05	0.9137	0.1885	43	-0.38	020.50	0
020	Total P2O5 (%)	0231	15.77	0.1200	16.05	0.9137	0.1885	43	-0.30	020.20	0
020	Total P2O5 (%)	0157	15.90	0.4000	16.05	0.9137	0.1885	43	-0.16	020.10	0
020	Total P2O5 (%)	0234	15.90	0.4000	16.05	0.9137	0.1885	43	-0.16	020.50	0
020	Total P2O5 (%)	0513	15.91	0.0400	16.05	0.9137	0.1885	43	-0.15	020.99	0
020	Total P2O5 (%)	0524	15.97	0.0819	16.05	0.9137	0.1885	43	-0.09	020.50	0
020	Total P2O5 (%)	0593	16.02	0.1050	16.05	0.9137	0.1885	43	-0.03	020.20	0
020	Total P2O5 (%)	0561	16.13	0.0200	16.05	0.9137	0.1885	43	0.09	020.20	0
020	Total P2O5 (%)	0476	16.14	0.3398	16.05	0.9137	0.1885	43	0.10	020.20	0
020	Total P2O5 (%)	0371	16.15	0.2300	16.05	0.9137	0.1885	43	0.11	020.20	0
020	Total P2O5 (%)	0602	16.15	0.1000	16.05	0.9137	0.1885	43	0.11	020.20	0
020	Total P2O5 (%)	0602	16.15	0.1000	16.05	0.9137	0.1885	43	0.11	020.99	0
020	Total P2O5 (%)	0368	16.28	0.2916	16.05	0.9137	0.1885	43	0.26	020.50	0
020	Total P2O5 (%)	0527	16.29	0.0105	16.05	0.9137	0.1885	43	0.27	020.50	0
020	Total P2O5 (%)	0292	16.41	0.0100	16.05	0.9137	0.1885	43	0.39	020.20	0
020	Total P2O5 (%)	0402	16.43	0.0200	16.05	0.9137	0.1885	43	0.42	020.50	0
020	Total P2O5 (%)	0255	16.50	0.4420	16.05	0.9137	0.1885	43	0.49	020.50	0
020	Total P2O5 (%)	0324	16.50	0.4000	16.05	0.9137	0.1885	43	0.50	020.20	0
020	Total P2O5 (%)	0260	16.74	0.5080	16.05	0.9137	0.1885	43	0.76	020.50	0
020	Total P2O5 (%)	0515	17.20	0.3800	16.05	0.9137	0.1885	43	1.26	020.99	0
020	Total P2O5 (%)	0422	17.20	0.2720	16.05	0.9137	0.1885	43	1.26	020.50	0
020	Total P2O5 (%)	0548	18.35	0.1000	16.05	0.9137	0.1885	43	2.52	020.20	0
020	Total P2O5 (%)	0498	18.65	0.5000	16.05	0.9137	0.1885	43	2.85	020.20	0
020	Total P2O5 (%)	0423	18.81	0.1000	16.05	0.9137	0.1885	43	3.02	020.50	0
020	Total P2O5 (%)	0600	19.02	0.1600	16.05	0.9137	0.1885	43	3.25	020.99	0
020	Total P2O5 (%)	0647	19.05	0.2000	16.05	0.9137	0.1885	43	3.29	020.99	0
020	Total P2O5 (%)	0638	19.12	0.5600	16.05	0.9137	0.1885	43	3.36	020.99	0
020	Total P2O5 (%)	0612	15.40	1.850	16.05	0.9137	0.1885	43	-0.71	020.50	1
020	Total P2O5 (%)	0523	1.697	0.0480	16.05	0.9137	0.1885	43	-15.70	020.50	2
030	Citrate Insoluble P2O5 (%)	0593	0.0450	0.0000	0.0800	0.0394	0.0167	6	-0.79	030.99	0
030	Citrate Insoluble P2O5 (%)	0586	0.0500	0.0200	0.0800	0.0394	0.0167	6	-0.68	030.40	0
030	Citrate Insoluble P2O5 (%)	0581	0.0550	0.0100	0.0800	0.0394	0.0167	6	-0.56	030.50	0
030	Citrate Insoluble P2O5 (%)	0602	0.1000	0.0000	0.0800	0.0394	0.0167	6	0.45	030.20	0
030	Citrate Insoluble P2O5 (%)	0602	0.1000	0.0000	0.0800	0.0394	0.0167	6	0.45	030.99	0
030	Citrate Insoluble P2O5 (%)	0096	0.1300	0.0200	0.0800	0.0394	0.0167	6	1.13	030.40	0
040	Indirect Available P2O5 (19%)	0405	15.31	0.0100	15.57	0.2840	0.1463	4	-0.94	040.99	0
040	Indirect Available P2O5 (19%)	0586	15.49	0.0300	15.57	0.2840	0.1463	4	-0.30	040.40	0
040	Indirect Available P2O5 (19%)	0096	15.52	0.4400	15.57	0.2840	0.1463	4	-0.18	040.40	0
040	Indirect Available P2O5 (19%)	0593	15.97	0.1050	15.57	0.2840	0.1463	4	1.42	040.99	0
041	Direct Available P2O5 (19%)	0394	14.31†	0.0730	15.67	0.7194	0.1643	38	-1.89	041.21	0
041	Direct Available P2O5 (19%)	0494	14.35†	0.3700	15.67	0.7194	0.1643	38	-1.84	041.51	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
041	Direct Available P2O5 (19%)	0472	14.68†	0.0100	15.67	0.7194	0.1643	38	-1.38	041.21	0
041	Direct Available P2O5 (19%)	0494	14.70†	0.6000	15.67	0.7194	0.1643	38	-1.35	041.10	0
041	Direct Available P2O5 (19%)	0377	14.71†	0.0900	15.67	0.7194	0.1643	38	-1.34	041.51	0
041	Direct Available P2O5 (19%)	0034	14.87†	0.2100	15.67	0.7194	0.1643	38	-1.12	041.40	0
041	Direct Available P2O5 (19%)	0405	14.96†	0.0000	15.67	0.7194	0.1643	38	-0.99	041.11	0
041	Direct Available P2O5 (19%)	0624	14.98	0.0493	15.67	0.7194	0.1643	38	-0.96	041.50	0
041	Direct Available P2O5 (19%)	0029	15.01	0.7800	15.67	0.7194	0.1643	38	-0.92	041.40	0
041	Direct Available P2O5 (19%)	0354	15.10	0.2000	15.67	0.7194	0.1643	38	-0.79	041.21	0
041	Direct Available P2O5 (19%)	0136	15.25	0.3000	15.67	0.7194	0.1643	38	-0.58	041.51	0
041	Direct Available P2O5 (19%)	0028	15.35	0.2400	15.67	0.7194	0.1643	38	-0.44	041.40	0
041	Direct Available P2O5 (19%)	0040	15.55	0.1000	15.67	0.7194	0.1643	38	-0.17	041.51	0
041	Direct Available P2O5 (19%)	0043	15.61	0.0400	15.67	0.7194	0.1643	38	-0.08	041.51	0
041	Direct Available P2O5 (19%)	0025	15.62	0.4500	15.67	0.7194	0.1643	38	-0.08	041.51	0
041	Direct Available P2O5 (19%)	0605	15.62	0.1800	15.67	0.7194	0.1643	38	-0.07	041.50	0
041	Direct Available P2O5 (19%)	0102	15.72	0.3200	15.67	0.7194	0.1643	38	0.07	041.10	0
041	Direct Available P2O5 (19%)	0095	15.73	1.090	15.67	0.7194	0.1643	38	0.08	041.21	0
041	Direct Available P2O5 (19%)	0360	15.73	0.0700	15.67	0.7194	0.1643	38	0.08	041.51	0
041	Direct Available P2O5 (19%)	0055	15.76	0.3500	15.67	0.7194	0.1643	38	0.12	041.11	0
041	Direct Available P2O5 (19%)	0513	15.78	0.0500	15.67	0.7194	0.1643	38	0.15	041.11	0
041	Direct Available P2O5 (19%)	0055	15.81	0.2650	15.67	0.7194	0.1643	38	0.19	041.21	0
041	Direct Available P2O5 (19%)	0049	15.84	0.2500	15.67	0.7194	0.1643	38	0.23	041.11	0
041	Direct Available P2O5 (19%)	0220	15.85	0.0400	15.67	0.7194	0.1643	38	0.25	041.11	0
041	Direct Available P2O5 (19%)	0117	15.91	0.2400	15.67	0.7194	0.1643	38	0.33	041.51	0
041	Direct Available P2O5 (19%)	0231	15.92	0.1200	15.67	0.7194	0.1643	38	0.35	041.21	0
041	Direct Available P2O5 (19%)	0177	15.97	0.0858	15.67	0.7194	0.1643	38	0.42	041.21	0
041	Direct Available P2O5 (19%)	0185	16.03	0.1100	15.67	0.7194	0.1643	38	0.49	041.11	0
041	Direct Available P2O5 (19%)	0602	16.05	0.1000	15.67	0.7194	0.1643	38	0.53	041.20	0
041	Direct Available P2O5 (19%)	0602	16.05	0.1000	15.67	0.7194	0.1643	38	0.53	041.99	0
041	Direct Available P2O5 (19%)	0177	16.10	0.1018	15.67	0.7194	0.1643	38	0.60	041.11	0
041	Direct Available P2O5 (19%)	0452	16.25	0.0400	15.67	0.7194	0.1643	38	0.81	041.20	0
041	Direct Available P2O5 (19%)	0027	16.30	0.0100	15.67	0.7194	0.1643	38	0.87	041.51	0
041	Direct Available P2O5 (19%)	0545	16.63‡	0.1800	15.67	0.7194	0.1643	38	1.33	041.99	0
041	Direct Available P2O5 (19%)	0023	16.64‡	0.0120	15.67	0.7194	0.1643	38	1.35	041.51	0
041	Direct Available P2O5 (19%)	0600	18.83‡	0.1400	15.67	0.7194	0.1643	38	4.39	041.99	0
041	Direct Available P2O5 (19%)	0536	18.96‡	0.0200	15.67	0.7194	0.1643	38	4.57	041.10	0
041	Direct Available P2O5 (19%)	0584	19.28‡	0.1200	15.67	0.7194	0.1643	38	5.02	041.99	0
041	Direct Available P2O5 (19%)	0421	16.72‡	2.790	15.67	0.7194	0.1643	38	1.45	041.50	1
042	Water Soluble OrthoP As P2O5 (%)	0577	19.13	0.4300				1		042.99	0
048	Water Soluble P2O5 (%)	0472	13.17	0.0100	14.19	0.5765	0.0544	9	-1.64	048.20	0
048	Water Soluble P2O5 (%)	0394	13.44	0.0280	14.19	0.5765	0.0544	9	-1.20	048.20	0
048	Water Soluble P2O5 (%)	0096	14.02	0.2400	14.19	0.5765	0.0544	9	-0.27	048.40	0
048	Water Soluble P2O5 (%)	0581	14.17	0.0200	14.19	0.5765	0.0544	9	-0.03	048.20	0
048	Water Soluble P2O5 (%)	0593	14.41	0.0050	14.19	0.5765	0.0544	9	0.36	048.20	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
048	Water Soluble P2O5 (%)	0602	14.50	0.1000	14.19	0.5765	0.0544	9	0.50	048.20	0
048	Water Soluble P2O5 (%)	0602	14.50	0.1000	14.19	0.5765	0.0544	9	0.50	048.99	0
048	Water Soluble P2O5 (%)	0513	14.55	0.0700	14.19	0.5765	0.0544	9	0.57	048.99	0
048	Water Soluble P2O5 (%)	0231	14.78	0.0200	14.19	0.5765	0.0544	9	0.95	048.20	0
050	Soluble K2O (19%)	0371	18.48†	0.2800	23.93	2.167	0.2998	72	-2.51	050.99	0
050	Soluble K2O (19%)	0600	18.98†	0.1500	23.93	2.167	0.2998	72	-2.29	050.99	0
050	Soluble K2O (19%)	0558	19.20†	0.2000	23.93	2.167	0.2998	72	-2.18	050.30	0
050	Soluble K2O (19%)	0405	19.36†	0.0800	23.93	2.167	0.2998	72	-2.11	050.00	0
050	Soluble K2O (19%)	0534	19.39†	0.5000	23.93	2.167	0.2998	72	-2.09	050.99	0
050	Soluble K2O (19%)	0584	19.42†	0.4800	23.93	2.167	0.2998	72	-2.08	050.99	0
050	Soluble K2O (19%)	0577	19.43†	0.2600	23.93	2.167	0.2998	72	-2.08	050.99	0
050	Soluble K2O (19%)	0548	19.60†	0.2000	23.93	2.167	0.2998	72	-2.00	050.99	0
050	Soluble K2O (19%)	0647	19.68†	0.5300	23.93	2.167	0.2998	72	-1.96	050.99	0
050	Soluble K2O (19%)	0423	19.73†	0.4210	23.93	2.167	0.2998	72	-1.94	050.52	0
050	Soluble K2O (19%)	0638	19.94†	1.400	23.93	2.167	0.2998	72	-1.84	050.99	0
050	Soluble K2O (19%)	0515	20.20†	1.120	23.93	2.167	0.2998	72	-1.72	050.99	0
050	Soluble K2O (19%)	0234	20.25†	0.5000	23.93	2.167	0.2998	72	-1.70	050.99	0
050	Soluble K2O (19%)	0049	21.35†	1.570	23.93	2.167	0.2998	72	-1.19	050.00	0
050	Soluble K2O (19%)	0402	21.35†	0.1850	23.93	2.167	0.2998	72	-1.19	050.99	0
050	Soluble K2O (19%)	0472	21.72†	0.0100	23.93	2.167	0.2998	72	-1.02	050.32	0
050	Soluble K2O (19%)	0476	22.60†	0.1307	23.93	2.167	0.2998	72	-0.62	050.99	0
050	Soluble K2O (19%)	0543	22.60†	0.1260	23.93	2.167	0.2998	72	-0.61	050.52	0
050	Soluble K2O (19%)	0255	22.78	0.8190	23.93	2.167	0.2998	72	-0.53	050.99	0
050	Soluble K2O (19%)	0602	23.30	0.2000	23.93	2.167	0.2998	72	-0.29	050.00	0
050	Soluble K2O (19%)	0602	23.30	0.2000	23.93	2.167	0.2998	72	-0.29	050.60	0
050	Soluble K2O (19%)	0602	23.30	0.2000	23.93	2.167	0.2998	72	-0.29	050.99	0
050	Soluble K2O (19%)	0220	23.73	0.0600	23.93	2.167	0.2998	72	-0.09	050.00	0
050	Soluble K2O (19%)	0389	23.94	0.3600	23.93	2.167	0.2998	72	0.00	050.99	0
050	Soluble K2O (19%)	0043	24.02	0.0500	23.93	2.167	0.2998	72	0.04	050.52	0
050	Soluble K2O (19%)	0536	24.02	0.2000	23.93	2.167	0.2998	72	0.04	050.99	0
050	Soluble K2O (19%)	0169	24.06	0.0400	23.93	2.167	0.2998	72	0.06	050.50	0
050	Soluble K2O (19%)	0433	24.10	1.480	23.93	2.167	0.2998	72	0.08	050.99	0
050	Soluble K2O (19%)	0096	24.15	0.6000	23.93	2.167	0.2998	72	0.10	050.99	0
050	Soluble K2O (19%)	0027	24.16	0.1400	23.93	2.167	0.2998	72	0.11	050.52	0
050	Soluble K2O (19%)	0524	24.17	0.5389	23.93	2.167	0.2998	72	0.11	050.99	0
050	Soluble K2O (19%)	0136	24.30	0.2000	23.93	2.167	0.2998	72	0.17	050.52	0
050	Soluble K2O (19%)	0513	24.31	0.0700	23.93	2.167	0.2998	72	0.17	050.52	0
050	Soluble K2O (19%)	0292	24.33	0.1500	23.93	2.167	0.2998	72	0.18	050.50	0
050	Soluble K2O (19%)	0102	24.35	0.2400	23.93	2.167	0.2998	72	0.19	050.00	0
050	Soluble K2O (19%)	0624	24.42	0.1271	23.93	2.167	0.2998	72	0.23	050.99	0
050	Soluble K2O (19%)	0498	24.45	0.1000	23.93	2.167	0.2998	72	0.24	050.99	0
050	Soluble K2O (19%)	0055	24.48	0.2250	23.93	2.167	0.2998	72	0.25	050.50	0
050	Soluble K2O (19%)	0291	24.49	0.0200	23.93	2.167	0.2998	72	0.26	050.51	0

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050	Soluble K2O (19%)	0177	24.52	0.2139	23.93	2.167	0.2998	72	0.27	050.99	0
050	Soluble K2O (19%)	0545	24.58	0.1500	23.93	2.167	0.2998	72	0.30	050.99	0
050	Soluble K2O (19%)	0231	24.66	0.0500	23.93	2.167	0.2998	72	0.33	050.00	0
050	Soluble K2O (19%)	0025	24.82	0.4200	23.93	2.167	0.2998	72	0.41	050.52	0
050	Soluble K2O (19%)	0185	24.84	0.4100	23.93	2.167	0.2998	72	0.42	050.32	0
050	Soluble K2O (19%)	0095	24.84	1.310	23.93	2.167	0.2998	72	0.42	050.62	0
050	Soluble K2O (19%)	0035	24.85	0.5000	23.93	2.167	0.2998	72	0.42	050.61	0
050	Soluble K2O (19%)	0023	24.85	0.2880	23.93	2.167	0.2998	72	0.43	050.52	0
050	Soluble K2O (19%)	0561	24.89	0.0300	23.93	2.167	0.2998	72	0.44	050.99	0
050	Soluble K2O (19%)	0260	24.90	1.082	23.93	2.167	0.2998	72	0.45	050.99	0
050	Soluble K2O (19%)	0055	24.93	0.4500	23.93	2.167	0.2998	72	0.46	050.00	0
050	Soluble K2O (19%)	0117	24.93	0.9800	23.93	2.167	0.2998	72	0.46	050.52	0
050	Soluble K2O (19%)	0028	24.94	0.2500	23.93	2.167	0.2998	72	0.46	050.62	0
050	Soluble K2O (19%)	0231	25.10	0.2700	23.93	2.167	0.2998	72	0.54	050.50	0
050	Soluble K2O (19%)	0040	25.15†	0.3000	23.93	2.167	0.2998	72	0.56	050.30	0
050	Soluble K2O (19%)	0605	25.19†	0.1800	23.93	2.167	0.2998	72	0.58	050.99	0
050	Soluble K2O (19%)	0521	25.27†	0.0000	23.93	2.167	0.2998	72	0.62	050.99	0
050	Soluble K2O (19%)	0169	25.31†	0.1000	23.93	2.167	0.2998	72	0.64	050.60	0
050	Soluble K2O (19%)	0360	25.32†	0.2600	23.93	2.167	0.2998	72	0.64	050.52	0
050	Soluble K2O (19%)	0034	25.37†	0.0900	23.93	2.167	0.2998	72	0.66	050.62	0
050	Soluble K2O (19%)	0377	25.65†	0.1600	23.93	2.167	0.2998	72	0.79	050.52	0
050	Soluble K2O (19%)	0354	25.70†	0.2000	23.93	2.167	0.2998	72	0.82	050.52	0
050	Soluble K2O (19%)	0494	25.76†	0.3100	23.93	2.167	0.2998	72	0.84	050.00	0
050	Soluble K2O (19%)	0368	25.83†	0.0477	23.93	2.167	0.2998	72	0.88	050.51	0
050	Soluble K2O (19%)	0494	25.92†	0.9600	23.93	2.167	0.2998	72	0.92	050.52	0
050	Soluble K2O (19%)	0394	25.97†	0.6460	23.93	2.167	0.2998	72	0.94	050.99	0
050	Soluble K2O (19%)	0452	26.05†	0.0700	23.93	2.167	0.2998	72	0.98	050.51	0
050	Soluble K2O (19%)	0527	26.13†	0.0428	23.93	2.167	0.2998	72	1.01	050.99	0
050	Soluble K2O (19%)	0510	26.17†	0.0402	23.93	2.167	0.2998	72	1.03	050.60	0
050	Soluble K2O (19%)	0029	26.61†	0.8300	23.93	2.167	0.2998	72	1.23	050.62	0
050	Soluble K2O (19%)	0422	27.09†	0.1330	23.93	2.167	0.2998	72	1.46	050.50	0
050	Soluble K2O (19%)	0582	27.10†	0.4490	23.93	2.167	0.2998	72	1.46	050.50	0
050	Soluble K2O (19%)	0421	27.86†	1.590	23.93	2.167	0.2998	72	1.81	050.99	0
050	Soluble K2O (19%)	0612	24.73	2.310	23.93	2.167	0.2998	72	0.37	050.99	1
050	Soluble K2O (19%)	0324	25.80†	2.000	23.93	2.167	0.2998	72	0.86	050.50	1
050	Soluble K2O (19%)	0523	2.673†	0.0400	23.93	2.167	0.2998	72	-9.81	050.99	2
060	Water (Free) (%)	0513	0.7100	0.0200	1.092	0.2857	0.0375	4	-1.34	060.00	0
060	Water (Free) (%)	0593	1.128	0.0350	1.092	0.2857	0.0375	4	0.12	060.30	0
060	Water (Free) (%)	0096	1.130	0.0800	1.092	0.2857	0.0375	4	0.13	060.00	0
060	Water (Free) (%)	0510	1.402	0.0151	1.092	0.2857	0.0375	4	1.08	060.99	0
101	Acid Soluble Ca (%)	0472	0.0850	0.0300	0.1415	0.0456	0.0130	8	-1.13	101.33	0
101	Acid Soluble Ca (%)	0582	0.1110	0.0020	0.1415	0.0456	0.0130	8	-0.61	101.33	0
101	Acid Soluble Ca (%)	0096	0.1140	0.0160	0.1415	0.0456	0.0130	8	-0.55	101.30	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
101	Acid Soluble Ca (%)	0593	0.1325	0.0150	0.1415	0.0456	0.0130	8	-0.18	101.99	0
101	Acid Soluble Ca (%)	0035	0.1445	0.0050	0.1415	0.0456	0.0130	8	0.06	101.30	0
101	Acid Soluble Ca (%)	0498	0.1500	0.0000	0.1415	0.0456	0.0130	8	0.17	101.03	0
101	Acid Soluble Ca (%)	0354	0.1950	0.0100	0.1415	0.0456	0.0130	8	1.07	101.30	0
101	Acid Soluble Ca (%)	0581	0.2000	0.0000	0.1415	0.0456	0.0130	8	1.17	101.32	0
101	Acid Soluble Ca (%)	0527	< 0.01		0.1415	0.0456	0.0130	8		101.33	5
101	Acid Soluble Ca (%)	0423	< 0.5		0.1415	0.0456	0.0130	8		101.32	5
121	Acid Soluble Mg (%)	0423	0.3085	0.0130	0.4219	0.0584	0.0123	15	-1.94	121.32	0
121	Acid Soluble Mg (%)	0515	0.3343	0.0343	0.4219	0.0584	0.0123	15	-1.50	121.99	0
121	Acid Soluble Mg (%)	0498	0.3800	0.0000	0.4219	0.0584	0.0123	15	-0.72	121.03	0
121	Acid Soluble Mg (%)	0371	0.3800	0.0200	0.4219	0.0584	0.0123	15	-0.72	121.30	0
121	Acid Soluble Mg (%)	0553	0.4060	0.0060	0.4219	0.0584	0.0123	15	-0.27	121.00	0
121	Acid Soluble Mg (%)	0096	0.4100	0.0200	0.4219	0.0584	0.0123	15	-0.20	121.30	0
121	Acid Soluble Mg (%)	0354	0.4250	0.0100	0.4219	0.0584	0.0123	15	0.05	121.30	0
121	Acid Soluble Mg (%)	0624	0.4268	0.0027	0.4219	0.0584	0.0123	15	0.08	121.33	0
121	Acid Soluble Mg (%)	0035	0.4285	0.0050	0.4219	0.0584	0.0123	15	0.11	121.30	0
121	Acid Soluble Mg (%)	0524	0.4338	0.0457	0.4219	0.0584	0.0123	15	0.20	121.99	0
121	Acid Soluble Mg (%)	0593	0.4350	0.0100	0.4219	0.0584	0.0123	15	0.22	121.99	0
121	Acid Soluble Mg (%)	0527	0.4410	0.0073	0.4219	0.0584	0.0123	15	0.33	121.33	0
121	Acid Soluble Mg (%)	0472	0.4750	0.0100	0.4219	0.0584	0.0123	15	0.91	121.33	0
121	Acid Soluble Mg (%)	0582	0.6850	0.0020	0.4219	0.0584	0.0123	15	4.50	121.33	0
121	Acid Soluble Mg (%)	0581	0.7200	0.0000	0.4219	0.0584	0.0123	15	5.10	121.30	0
121	Acid Soluble Mg (%)	0515	0.4648	0.2186	0.4219	0.0584	0.0123	15	0.73	121.33	1
145	Sulfate S, HCl soluble (%)	0593	0.5725	0.0050				1		145.99	0
148	Total S (%)	0354	0.4050	0.0300	0.4968	0.0563	0.0344	5	-1.42	148.99	0
148	Total S (%)	0422	0.4870	0.0020	0.4968	0.0563	0.0344	5	-0.15	148.99	0
148	Total S (%)	0472	0.5200	0.0000	0.4968	0.0563	0.0344	5	0.36	148.07	0
148	Total S (%)	0096	0.5200	0.0000	0.4968	0.0563	0.0344	5	0.36	148.99	0
148	Total S (%)	0515	0.5521	0.0712	0.4968	0.0563	0.0344	5	0.86	148.07	0
148	Total S (%)	0527	< 0.1		0.4968	0.0563	0.0344	5		148.07	5
149	S - HNO3 soluble (%)	0524	0.5206	0.0482				1		149.04	0
151	Acid Soluble As (ppm)	0498	0.4400	0.0800	0.5832	0.1074	0.0722	7	-1.33	151.00	0
151	Acid Soluble As (ppm)	0476	0.5235	0.0270	0.5832	0.1074	0.0722	7	-0.56	151.30	0
151	Acid Soluble As (ppm)	0534	0.5450	0.0500	0.5832	0.1074	0.0722	7	-0.36	151.99	0
151	Acid Soluble As (ppm)	0548	0.6000	0.0400	0.5832	0.1074	0.0722	7	0.16	151.33	0
151	Acid Soluble As (ppm)	0524	0.6095	0.0326	0.5832	0.1074	0.0722	7	0.25	151.30	0
151	Acid Soluble As (ppm)	0593	0.6200	0.1200	0.5832	0.1074	0.0722	7	0.34	151.30	0
151	Acid Soluble As (ppm)	0368	10.05	1.500	0.5832	0.1074	0.0722	7	88.17	151.34	0
151	Acid Soluble As (ppm)	0515	15.59	27.43	0.5832	0.1074	0.0722	7	139.72	151.33	1
151	Acid Soluble As (ppm)	0255	0.0000	0.0000	0.5832	0.1074	0.0722	7		151.30	4
151	Acid Soluble As (ppm)	0586	0.0000	0.0000	0.5832	0.1074	0.0722	7		151.30	4
151	Acid Soluble As (ppm)	0527	< 0.0001		0.5832	0.1074	0.0722	7		151.33	5
151	Acid Soluble As (ppm)	0220	< 0.5		0.5832	0.1074	0.0722	7		151.32	5

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
151	Acid Soluble As (ppm)	0220	< 0.5		0.5832	0.1074	0.0722	7		151.99	5
151	Acid Soluble As (ppm)	0136	< 1		0.5832	0.1074	0.0722	7		151.33	5
151	Acid Soluble As (ppm)	0405	< 3		0.5832	0.1074	0.0722	7		151.32	5
151	Acid Soluble As (ppm)	0605	< 6.25		0.5832	0.1074	0.0722	7		151.30	5
151	Acid Soluble As (ppm)	0027	< 10		0.5832	0.1074	0.0722	7		151.33	5
165	Acid Soluble B (%)	0524	0.0033	0.0000	0.0077	0.0048	0.0067	5	-0.79	165.99	0
165	Acid Soluble B (%)	0515	0.0041	0.0034	0.0077	0.0048	0.0067	5	-0.65	165.99	0
165	Acid Soluble B (%)	0553	0.0060	0.0000	0.0077	0.0048	0.0067	5	-0.30	165.00	0
165	Acid Soluble B (%)	0472	0.0100	0.0000	0.0077	0.0048	0.0067	5	0.42	165.99	0
165	Acid Soluble B (%)	0354	0.0150	0.0100	0.0077	0.0048	0.0067	5	1.32	165.30	0
165	Acid Soluble B (%)	0371	0.0000	0.0000	0.0077	0.0048	0.0067	5		165.30	4
165	Acid Soluble B (%)	0423	< 0.0005		0.0077	0.0048	0.0067	5		165.99	5
165	Acid Soluble B (%)	0527	< 0.01		0.0077	0.0048	0.0067	5		165.99	5
181	Acid Soluble Cd (ppm)	0524	11.69	3.747	16.68	1.895	0.5805	19	-2.63	181.30	0
181	Acid Soluble Cd (ppm)	0476	13.91	0.6790	16.68	1.895	0.5805	19	-1.46	181.30	0
181	Acid Soluble Cd (ppm)	0086	14.58	0.7260	16.68	1.895	0.5805	19	-1.11	181.33	0
181	Acid Soluble Cd (ppm)	0605	15.19	0.3600	16.68	1.895	0.5805	19	-0.79	181.30	0
181	Acid Soluble Cd (ppm)	0102	16.00	0.2000	16.68	1.895	0.5805	19	-0.36	181.30	0
181	Acid Soluble Cd (ppm)	0394	16.00	0.4000	16.68	1.895	0.5805	19	-0.36	181.30	0
181	Acid Soluble Cd (ppm)	0405	16.00	0.0000	16.68	1.895	0.5805	19	-0.36	181.32	0
181	Acid Soluble Cd (ppm)	0368	16.00	0.0000	16.68	1.895	0.5805	19	-0.36	181.34	0
181	Acid Soluble Cd (ppm)	0136	16.40	0.0000	16.68	1.895	0.5805	19	-0.15	181.33	0
181	Acid Soluble Cd (ppm)	0220	16.60	0.6000	16.68	1.895	0.5805	19	-0.04	181.32	0
181	Acid Soluble Cd (ppm)	0255	16.64	0.7600	16.68	1.895	0.5805	19	-0.02	181.30	0
181	Acid Soluble Cd (ppm)	0220	16.90	0.2000	16.68	1.895	0.5805	19	0.12	181.99	0
181	Acid Soluble Cd (ppm)	0593	17.30	0.2000	16.68	1.895	0.5805	19	0.33	181.30	0
181	Acid Soluble Cd (ppm)	0035	17.50	0.0000	16.68	1.895	0.5805	19	0.43	181.30	0
181	Acid Soluble Cd (ppm)	0027	18.02	0.2780	16.68	1.895	0.5805	19	0.71	181.33	0
181	Acid Soluble Cd (ppm)	0527	18.23	0.1354	16.68	1.895	0.5805	19	0.82	181.33	0
181	Acid Soluble Cd (ppm)	0548	18.79	0.0100	16.68	1.895	0.5805	19	1.11	181.33	0
181	Acid Soluble Cd (ppm)	0096	20.15	2.100	16.68	1.895	0.5805	19	1.83	181.30	0
181	Acid Soluble Cd (ppm)	0586	21.90	2.200	16.68	1.895	0.5805	19	2.75	181.30	0
181	Acid Soluble Cd (ppm)	0515	7.100	8.600	16.68	1.895	0.5805	19	-5.06	181.34	1
181	Acid Soluble Cd (ppm)	0498	< 0.1		16.68	1.895	0.5805	19		181.00	5
190	Water Soluble Cl (%)	0513	18.52	0.0900				1		190.99	0
191	Acid Soluble Cr (ppm)	0524	76.03	0.9784	98.53	12.01	2.943	20	-1.87	191.30	0
191	Acid Soluble Cr (ppm)	0394	81.35	4.500	98.53	12.01	2.943	20	-1.43	191.30	0
191	Acid Soluble Cr (ppm)	0368	83.10	0.6000	98.53	12.01	2.943	20	-1.28	191.34	0
191	Acid Soluble Cr (ppm)	0476	83.79	6.305	98.53	12.01	2.943	20	-1.23	191.30	0
191	Acid Soluble Cr (ppm)	0035	90.40	1.200	98.53	12.01	2.943	20	-0.68	191.30	0
191	Acid Soluble Cr (ppm)	0515	93.60	10.20	98.53	12.01	2.943	20	-0.41	191.34	0
191	Acid Soluble Cr (ppm)	0605	95.77	2.300	98.53	12.01	2.943	20	-0.23	191.30	0
191	Acid Soluble Cr (ppm)	0405	97.50	1.000	98.53	12.01	2.943	20	-0.09	191.32	0

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191	Acid Soluble Cr (ppm)	0136	98.60	2.800	98.53	12.01	2.943	20	0.01	191.33	0
191	Acid Soluble Cr (ppm)	0220	98.95	0.5000	98.53	12.01	2.943	20	0.03	191.99	0
191	Acid Soluble Cr (ppm)	0220	99.55	1.100	98.53	12.01	2.943	20	0.08	191.32	0
191	Acid Soluble Cr (ppm)	0515	99.83	11.35	98.53	12.01	2.943	20	0.11	191.33	0
191	Acid Soluble Cr (ppm)	0612	100.3	10.03	98.53	12.01	2.943	20	0.15	191.33	0
191	Acid Soluble Cr (ppm)	0586	106.0	0.0000	98.53	12.01	2.943	20	0.62	191.30	0
191	Acid Soluble Cr (ppm)	0527	106.5	0.4480	98.53	12.01	2.943	20	0.66	191.33	0
191	Acid Soluble Cr (ppm)	0102	107.8	1.100	98.53	12.01	2.943	20	0.77	191.30	0
191	Acid Soluble Cr (ppm)	0027	108.2	0.9110	98.53	12.01	2.943	20	0.81	191.33	0
191	Acid Soluble Cr (ppm)	0096	109.0	0.0000	98.53	12.01	2.943	20	0.87	191.30	0
191	Acid Soluble Cr (ppm)	0548	113.3	3.610	98.53	12.01	2.943	20	1.23	191.33	0
191	Acid Soluble Cr (ppm)	0593	121.0	0.0000	98.53	12.01	2.943	20	1.87	191.30	0
202	Acid Soluble Co (ppm)	0220	0.4900	0.0000	0.7213	0.3526	0.0776	8	-0.66	202.32	0
202	Acid Soluble Co (ppm)	0548	0.5150	0.0100	0.7213	0.3526	0.0776	8	-0.59	202.33	0
202	Acid Soluble Co (ppm)	0476	0.5330	0.0460	0.7213	0.3526	0.0776	8	-0.53	202.30	0
202	Acid Soluble Co (ppm)	0220	0.5700	0.0200	0.7213	0.3526	0.0776	8	-0.43	202.99	0
202	Acid Soluble Co (ppm)	0593	0.6000	0.0000	0.7213	0.3526	0.0776	8	-0.34	202.30	0
202	Acid Soluble Co (ppm)	0527	0.6235	0.0265	0.7213	0.3526	0.0776	8	-0.28	202.33	0
202	Acid Soluble Co (ppm)	0524	1.189	0.1400	0.7213	0.3526	0.0776	8	1.33	202.30	0
202	Acid Soluble Co (ppm)	0586	3.000	2.000	0.7213	0.3526	0.0776	8	6.46	202.30	0
202	Acid Soluble Co (ppm)	0096	7.245	2.190	0.7213	0.3526	0.0776	8	18.50	202.30	1
202	Acid Soluble Co (ppm)	0255	0.0000	0.0000	0.7213	0.3526	0.0776	8		202.99	4
202	Acid Soluble Co (ppm)	0368	< 0.1		0.7213	0.3526	0.0776	8		202.34	5
202	Acid Soluble Co (ppm)	0405	< 1		0.7213	0.3526	0.0776	8		202.32	5
202	Acid Soluble Co (ppm)	0605	< 1.25		0.7213	0.3526	0.0776	8		202.30	5
202	Acid Soluble Co (ppm)	0136	< 2.5		0.7213	0.3526	0.0776	8		202.33	5
202	Acid Soluble Co (ppm)	0027	< 10		0.7213	0.3526	0.0776	8		202.33	5
202	Acid Soluble Co (ppm)	0086	< 10		0.7213	0.3526	0.0776	8		202.33	5
221	Acid Soluble Cu (%)	0548	0.0001	0.0000	0.0018	0.0016	0.0003	7	-1.01	221.33	0
221	Acid Soluble Cu (%)	0524	0.0002	0.0001	0.0018	0.0016	0.0003	7	-0.98	221.99	0
221	Acid Soluble Cu (%)	0035	0.0013	0.0004	0.0018	0.0016	0.0003	7	-0.28	221.30	0
221	Acid Soluble Cu (%)	0624	0.0019	0.0003	0.0018	0.0016	0.0003	7	0.05	221.33	0
221	Acid Soluble Cu (%)	0096	0.0020	0.0000	0.0018	0.0016	0.0003	7	0.15	221.30	0
221	Acid Soluble Cu (%)	0402	0.0027	0.0004	0.0018	0.0016	0.0003	7	0.57	221.30	0
221	Acid Soluble Cu (%)	0605	0.0050	0.0000	0.0018	0.0016	0.0003	7	1.97	221.99	0
221	Acid Soluble Cu (%)	0255	0.0000	0.0000	0.0018	0.0016	0.0003	7		221.30	4
221	Acid Soluble Cu (%)	0371	0.0000	0.0000	0.0018	0.0016	0.0003	7		221.30	4
221	Acid Soluble Cu (%)	0586	0.0000	0.0000	0.0018	0.0016	0.0003	7		221.99	4
221	Acid Soluble Cu (%)	0527	< 0.0001		0.0018	0.0016	0.0003	7		221.33	5
221	Acid Soluble Cu (%)	0593	< 0.0001		0.0018	0.0016	0.0003	7		221.99	5
221	Acid Soluble Cu (%)	0405	< 0.0002		0.0018	0.0016	0.0003	7		221.32	5
221	Acid Soluble Cu (%)	0136	< 0.0002		0.0018	0.0016	0.0003	7		221.33	5
221	Acid Soluble Cu (%)	0394	< 0.0002		0.0018	0.0016	0.0003	7		221.33	5

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221	Acid Soluble Cu (%)	0027	< 0.001		0.0018	0.0016	0.0003	7		221.33	5
221	Acid Soluble Cu (%)	0354	< 0.01		0.0018	0.0016	0.0003	7		221.30	5
221	Acid Soluble Cu (%)	0086	< 10		0.0018	0.0016	0.0003	7		221.33	5
241	Acid Soluble Fe (%)	0096	0.0037	0.0001	0.3445	0.0754	0.0092	15	-4.52	241.30	0
241	Acid Soluble Fe (%)	0582	0.1260	0.0040	0.3445	0.0754	0.0092	15	-2.90	241.33	0
241	Acid Soluble Fe (%)	0498	0.2350	0.0100	0.3445	0.0754	0.0092	15	-1.45	241.03	0
241	Acid Soluble Fe (%)	0515	0.3216	0.0234	0.3445	0.0754	0.0092	15	-0.30	241.99	0
241	Acid Soluble Fe (%)	0371	0.3300	0.0000	0.3445	0.0754	0.0092	15	-0.19	241.30	0
241	Acid Soluble Fe (%)	0423	0.3364	0.0203	0.3445	0.0754	0.0092	15	-0.11	241.32	0
241	Acid Soluble Fe (%)	0035	0.3560	0.0020	0.3445	0.0754	0.0092	15	0.15	241.30	0
241	Acid Soluble Fe (%)	0472	0.3600	0.0000	0.3445	0.0754	0.0092	15	0.21	241.33	0
241	Acid Soluble Fe (%)	0354	0.3700	0.0000	0.3445	0.0754	0.0092	15	0.34	241.30	0
241	Acid Soluble Fe (%)	0402	0.3742	0.0035	0.3445	0.0754	0.0092	15	0.39	241.30	0
241	Acid Soluble Fe (%)	0524	0.3831	0.0157	0.3445	0.0754	0.0092	15	0.51	241.99	0
241	Acid Soluble Fe (%)	0593	0.3875	0.0050	0.3445	0.0754	0.0092	15	0.57	241.99	0
241	Acid Soluble Fe (%)	0527	0.3939	0.0012	0.3445	0.0754	0.0092	15	0.66	241.33	0
241	Acid Soluble Fe (%)	0553	0.3995	0.0050	0.3445	0.0754	0.0092	15	0.73	241.00	0
241	Acid Soluble Fe (%)	0581	0.5500	0.0200	0.3445	0.0754	0.0092	15	2.73	241.32	0
251	Acid Soluble Pb (ppm)	0548	0.1050	0.0100	1.894	2.709	0.4288	8	-0.66	251.33	0
251	Acid Soluble Pb (ppm)	0593	0.1300	0.0000	1.894	2.709	0.4288	8	-0.65	251.99	0
251	Acid Soluble Pb (ppm)	0524	0.2842	0.4126	1.894	2.709	0.4288	8	-0.59	251.30	0
251	Acid Soluble Pb (ppm)	0220	0.6400	0.2600	1.894	2.709	0.4288	8	-0.46	251.32	0
251	Acid Soluble Pb (ppm)	0220	0.7350	0.0500	1.894	2.709	0.4288	8	-0.43	251.99	0
251	Acid Soluble Pb (ppm)	0586	2.000	0.0000	1.894	2.709	0.4288	8	0.04	251.30	0
251	Acid Soluble Pb (ppm)	0515	5.300	0.8000	1.894	2.709	0.4288	8	1.26	251.34	0
251	Acid Soluble Pb (ppm)	0515	9.630	1.040	1.894	2.709	0.4288	8	2.86	251.33	0
251	Acid Soluble Pb (ppm)	0368	9.050	1.900	1.894	2.709	0.4288	8	2.64	251.34	1
251	Acid Soluble Pb (ppm)	0255	0.0000	0.0000	1.894	2.709	0.4288	8		251.30	4
251	Acid Soluble Pb (ppm)	0527	< 0.0001		1.894	2.709	0.4288	8		251.33	5
251	Acid Soluble Pb (ppm)	0476	< 0.1		1.894	2.709	0.4288	8		251.30	5
251	Acid Soluble Pb (ppm)	0498	< 0.5		1.894	2.709	0.4288	8		251.00	5
251	Acid Soluble Pb (ppm)	0394	< 1		1.894	2.709	0.4288	8		251.30	5
251	Acid Soluble Pb (ppm)	0534	< 2		1.894	2.709	0.4288	8		251.99	5
251	Acid Soluble Pb (ppm)	0136	< 3		1.894	2.709	0.4288	8		251.33	5
251	Acid Soluble Pb (ppm)	0405	< 4		1.894	2.709	0.4288	8		251.32	5
251	Acid Soluble Pb (ppm)	0605	< 6.25		1.894	2.709	0.4288	8		251.30	5
251	Acid Soluble Pb (ppm)	0027	< 10		1.894	2.709	0.4288	8		251.33	5
261	Acid Soluble Mn (%)	0524	0.0065	0.0002	0.0068	0.0003	0.0001	6	-0.92	261.99	0
261	Acid Soluble Mn (%)	0035	0.0066	0.0000	0.0068	0.0003	0.0001	6	-0.65	261.30	0
261	Acid Soluble Mn (%)	0096	0.0069	0.0001	0.0068	0.0003	0.0001	6	0.03	261.30	0
261	Acid Soluble Mn (%)	0527	0.0069	0.0001	0.0068	0.0003	0.0001	6	0.03	261.35	0
261	Acid Soluble Mn (%)	0402	0.0069	0.0000	0.0068	0.0003	0.0001	6	0.17	261.32	0
261	Acid Soluble Mn (%)	0624	0.0106	0.0001	0.0068	0.0003	0.0001	6	10.13	261.35	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
261	Acid Soluble Mn (%)	0553	0.0065	0.0010	0.0068	0.0003	0.0001	6	-0.92	261.00	1
261	Acid Soluble Mn (%)	0371	0.0000	0.0000	0.0068	0.0003	0.0001	6		261.32	4
261	Acid Soluble Mn (%)	0423	< 0.0005		0.0068	0.0003	0.0001	6		261.34	5
261	Acid Soluble Mn (%)	0354	< 0.01		0.0068	0.0003	0.0001	6		261.30	5
281	Acid Soluble Hg (ppm)	0524	0.0002	0.0001				1		281.99	0
281	Acid Soluble Hg (ppm)	0527	< 0.001					1		281.30	5
281	Acid Soluble Hg (ppm)	0515	< 0.01					1		281.30	5
281	Acid Soluble Hg (ppm)	0220	< 0.01					1		281.99	5
281	Acid Soluble Hg (ppm)	0534	< 0.05					1		281.00	5
281	Acid Soluble Hg (ppm)	0476	< 0.1					1		281.30	5
281	Acid Soluble Hg (ppm)	0498	< 0.5					1		281.00	5
281	Acid Soluble Hg (ppm)	0605	< 1.25					1		281.30	5
281	Acid Soluble Hg (ppm)	0405	< 2					1		281.30	5
289	Acid Soluble Mo (ppm)	0523	0.0530	0.0180	3.625	1.013	0.2500	15	-3.53	289.30	0
289	Acid Soluble Mo (ppm)	0368	2.350	0.5000	3.625	1.013	0.2500	15		289.34	0
289	Acid Soluble Mo (ppm)	0035	2.735	0.0700	3.625	1.013	0.2500	15		289.30	0
289	Acid Soluble Mo (ppm)	0548	3.100	0.0200	3.625	1.013	0.2500	15		289.33	0
289	Acid Soluble Mo (ppm)	0524	3.191	0.4245	3.625	1.013	0.2500	15		289.30	0
289	Acid Soluble Mo (ppm)	0136	3.400	0.4000	3.625	1.013	0.2500	15		289.33	0
289	Acid Soluble Mo (ppm)	0220	3.465	0.0100	3.625	1.013	0.2500	15		289.32	0
289	Acid Soluble Mo (ppm)	0220	3.480	0.0200	3.625	1.013	0.2500	15		289.99	0
289	Acid Soluble Mo (ppm)	0405	3.500	1.000	3.625	1.013	0.2500	15		289.32	0
289	Acid Soluble Mo (ppm)	0605	3.950	0.0200	3.625	1.013	0.2500	15		289.30	0
289	Acid Soluble Mo (ppm)	0527	3.969	0.1165	3.625	1.013	0.2500	15		289.33	0
289	Acid Soluble Mo (ppm)	0255	4.380	0.4200	3.625	1.013	0.2500	15		289.30	0
289	Acid Soluble Mo (ppm)	0593	4.750	0.1000	3.625	1.013	0.2500	15		289.30	0
289	Acid Soluble Mo (ppm)	0402	4.850	0.3000	3.625	1.013	0.2500	15		289.30	0
289	Acid Soluble Mo (ppm)	0586	5.500	1.000	3.625	1.013	0.2500	15		289.30	0
289	Acid Soluble Mo (ppm)	0096	14.95	2.900	3.625	1.013	0.2500	15		289.30	1
291	Acid Soluble Ni (ppm)	0524	10.31	1.411	13.16	2.195	0.4905	19	-1.30	291.30	0
291	Acid Soluble Ni (ppm)	0476	10.52	0.8250	13.16	2.195	0.4905	19		291.30	0
291	Acid Soluble Ni (ppm)	0086	10.63	0.8520	13.16	2.195	0.4905	19		291.33	0
291	Acid Soluble Ni (ppm)	0548	11.23	0.2800	13.16	2.195	0.4905	19		291.33	0
291	Acid Soluble Ni (ppm)	0394	11.55	0.1000	13.16	2.195	0.4905	19		291.30	0
291	Acid Soluble Ni (ppm)	0136	12.35	0.1000	13.16	2.195	0.4905	19		291.33	0
291	Acid Soluble Ni (ppm)	0605	12.59	0.0100	13.16	2.195	0.4905	19		291.30	0
291	Acid Soluble Ni (ppm)	0027	12.76	0.0270	13.16	2.195	0.4905	19		291.33	0
291	Acid Soluble Ni (ppm)	0586	13.00	0.0000	13.16	2.195	0.4905	19		291.30	0
291	Acid Soluble Ni (ppm)	0220	13.00	0.2000	13.16	2.195	0.4905	19		291.32	0
291	Acid Soluble Ni (ppm)	0220	13.05	0.1000	13.16	2.195	0.4905	19		291.99	0
291	Acid Soluble Ni (ppm)	0035	13.20	0.2000	13.16	2.195	0.4905	19		291.30	0
291	Acid Soluble Ni (ppm)	0255	13.29	0.1800	13.16	2.195	0.4905	19		291.99	0
291	Acid Soluble Ni (ppm)	0405	13.50	1.000	13.16	2.195	0.4905	19		291.32	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
291	Acid Soluble Ni (ppm)	0527	14.33	0.0238	13.16	2.195	0.4905	19	0.53	291.33	0
291	Acid Soluble Ni (ppm)	0368	15.55	0.5000	13.16	2.195	0.4905	19	1.09	291.34	0
291	Acid Soluble Ni (ppm)	0593	16.25	0.5000	13.16	2.195	0.4905	19	1.41	291.30	0
291	Acid Soluble Ni (ppm)	0102	16.50	1.800	13.16	2.195	0.4905	19	1.52	291.30	0
291	Acid Soluble Ni (ppm)	0096	22.60	4.000	13.16	2.195	0.4905	19	4.30	291.30	0
291	Acid Soluble Ni (ppm)	0515	32.30	5.400	13.16	2.195	0.4905	19	8.72	291.34	1
291	Acid Soluble Ni (ppm)	0498	< 10		13.16	2.195	0.4905	19		291.00	5
301	Acid Soluble Se (ppm)	0548	0.0850	0.0100	0.2930	0.3126	0.1158	6	-0.67	301.33	0
301	Acid Soluble Se (ppm)	0524	0.0963	0.0262	0.2930	0.3126	0.1158	6	-0.63	301.30	0
301	Acid Soluble Se (ppm)	0593	0.1000	0.0000	0.2930	0.3126	0.1158	6	-0.62	301.30	0
301	Acid Soluble Se (ppm)	0220	0.2300	0.0000	0.2930	0.3126	0.1158	6	-0.20	301.99	0
301	Acid Soluble Se (ppm)	0220	0.4850	0.3500	0.2930	0.3126	0.1158	6	0.61	301.32	0
301	Acid Soluble Se (ppm)	0476	1.405	0.0770	0.2930	0.3126	0.1158	6	3.56	301.30	0
301	Acid Soluble Se (ppm)	0515	31.33	50.94	0.2930	0.3126	0.1158	6	99.29	301.33	1
301	Acid Soluble Se (ppm)	0255	0.0000	0.0000	0.2930	0.3126	0.1158	6		301.99	4
301	Acid Soluble Se (ppm)	0527	< 0.01		0.2930	0.3126	0.1158	6		301.33	5
301	Acid Soluble Se (ppm)	0368	< 1.4		0.2930	0.3126	0.1158	6		301.34	5
301	Acid Soluble Se (ppm)	0605	< 6.25		0.2930	0.3126	0.1158	6		301.30	5
301	Acid Soluble Se (ppm)	0405	< 10		0.2930	0.3126	0.1158	6		301.32	5
301	Acid Soluble Se (ppm)	0027	< 10		0.2930	0.3126	0.1158	6		301.33	5
311	Sodium (%)	0423	0.5460	0.0020	0.5900	0.0572	0.0208	8	-0.70	311.33	0
311	Sodium (%)	0553	0.5510	0.0040	0.5900	0.0572	0.0208	8	-0.62	311.00	0
311	Sodium (%)	0035	0.5560	0.0260	0.5900	0.0572	0.0208	8	-0.54	311.33	0
311	Sodium (%)	0096	0.5700	0.0200	0.5900	0.0572	0.0208	8	-0.32	311.99	0
311	Sodium (%)	0354	0.5700	0.0400	0.5900	0.0572	0.0208	8	-0.32	311.99	0
311	Sodium (%)	0527	0.5899	0.0136	0.5900	0.0572	0.0208	8	0.00	311.33	0
311	Sodium (%)	0582	0.6610	0.0440	0.5900	0.0572	0.0208	8	1.14	311.32	0
311	Sodium (%)	0624	0.6774	0.0171	0.5900	0.0572	0.0208	8	1.40	311.33	0
321	Acid Soluble Zn (%)	0523	0.0030	0.0000	0.0220	0.0023	0.0008	28	-8.15	321.99	0
321	Acid Soluble Zn (%)	0354	0.0100	0.0000	0.0220	0.0023	0.0008	28	-5.15	321.30	0
321	Acid Soluble Zn (%)	0593	0.0195	0.0010	0.0220	0.0023	0.0008	28	-1.07	321.99	0
321	Acid Soluble Zn (%)	0368	0.0199	0.0003	0.0220	0.0023	0.0008	28	-0.92	321.99	0
321	Acid Soluble Zn (%)	0371	0.0200	0.0000	0.0220	0.0023	0.0008	28	-0.86	321.30	0
321	Acid Soluble Zn (%)	0136	0.0200	0.0000	0.0220	0.0023	0.0008	28	-0.86	321.33	0
321	Acid Soluble Zn (%)	0472	0.0200	0.0000	0.0220	0.0023	0.0008	28	-0.86	321.33	0
321	Acid Soluble Zn (%)	0548	0.0200	0.0000	0.0220	0.0023	0.0008	28	-0.86	321.33	0
321	Acid Soluble Zn (%)	0605	0.0200	0.0000	0.0220	0.0023	0.0008	28	-0.86	321.99	0
321	Acid Soluble Zn (%)	0086	0.0206	0.0008	0.0220	0.0023	0.0008	28	-0.60	321.33	0
321	Acid Soluble Zn (%)	0405	0.0207	0.0007	0.0220	0.0023	0.0008	28	-0.58	321.32	0
321	Acid Soluble Zn (%)	0394	0.0213	0.0004	0.0220	0.0023	0.0008	28	-0.30	321.33	0
321	Acid Soluble Zn (%)	0220	0.0223	0.0006	0.0220	0.0023	0.0008	28	0.13	321.32	0
321	Acid Soluble Zn (%)	0220	0.0225	0.0009	0.0220	0.0023	0.0008	28	0.20	321.99	0
321	Acid Soluble Zn (%)	0553	0.0225	0.0010	0.0220	0.0023	0.0008	28	0.22	321.00	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
321	Acid Soluble Zn (%)	0515	0.0229	0.0001	0.0220	0.0023	0.0008	28	0.37	321.33	0
321	Acid Soluble Zn (%)	0515	0.0229	0.0002	0.0220	0.0023	0.0008	28	0.39	321.99	0
321	Acid Soluble Zn (%)	0255	0.0230	0.0000	0.0220	0.0023	0.0008	28	0.43	321.30	0
321	Acid Soluble Zn (%)	0027	0.0230	0.0000	0.0220	0.0023	0.0008	28	0.43	321.33	0
321	Acid Soluble Zn (%)	0043	0.0230	0.0000	0.0220	0.0023	0.0008	28	0.43	321.33	0
321	Acid Soluble Zn (%)	0498	0.0235	0.0010	0.0220	0.0023	0.0008	28	0.65	321.03	0
321	Acid Soluble Zn (%)	0527	0.0236	0.0007	0.0220	0.0023	0.0008	28	0.67	321.33	0
321	Acid Soluble Zn (%)	0402	0.0238	0.0003	0.0220	0.0023	0.0008	28	0.75	321.30	0
321	Acid Soluble Zn (%)	0035	0.0240	0.0000	0.0220	0.0023	0.0008	28	0.86	321.30	0
321	Acid Soluble Zn (%)	0524	0.0244	0.0018	0.0220	0.0023	0.0008	28	1.03	321.99	0
321	Acid Soluble Zn (%)	0096	0.0249	0.0000	0.0220	0.0023	0.0008	28	1.25	321.30	0
321	Acid Soluble Zn (%)	0612	0.0254	0.0067	0.0220	0.0023	0.0008	28	1.44	321.33	0
321	Acid Soluble Zn (%)	0624	0.0445	0.0056	0.0220	0.0023	0.0008	28	9.66	321.33	0
321	Acid Soluble Zn (%)	0095	0.0250	0.0100	0.0220	0.0023	0.0008	28	1.29	321.32	1
321	Acid Soluble Zn (%)	0586	0.0000	0.0000	0.0220	0.0023	0.0008	28		321.99	4
325	Water Soluble Zn (%)	0368	0.0199	0.0003				1		325.30	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. Identical duplicates not included in calculation of Rob R-bar. 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.