

Analyte PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Analytes: 33

Sample # 250811

Regular PT Scheme

Labs Reporting: 76

21-7-14

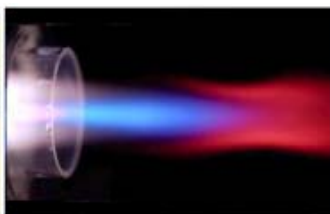
Statistical Summary

Issue Date : 09/30/2025

Analyte Code	Analyte Sample # 250811	# 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 (%)	30	29	10.98	0.6585	11.05		0.3861	0.0896	3.49%		0.0960	2.79%
002	Nitrate N (%)	22	21	9.757	0.5256	9.744		0.3121	0.0851	3.20%		0.1626	2.84%
005	Urea N (%)	2	2	10.69	14.77								
010	Total N (21%)	64	64	20.89	0.5293	20.93	0.7393	0.4129	0.0645	1.97%	1.30	0.1475	2.19%
020	Total P2O5 (%)	41	40	6.714	1.012	6.858		0.3072	0.0607	4.48%		0.1419	2.99%
030	Citrate Insoluble P2O5 (%)	3	3	0.0433	0.0289	0.0433		0.0289	0.0208	66.62%		0.0100	6.41%
040	Indirect Available P2O5 (7%)	2	2	6.755	0.0707								
041	Direct Available P2O5 (7%)	40	38	6.806	1.303	6.782	0.6778	0.2151	0.0436	3.17%	0.74	0.0902	3.00%
042	Water Soluble OrthoP As P2O5 (%)	1		7.270									
048	Water Soluble P2O5 (%)	5	5	4.521	0.1883	4.521		0.1883	0.1053	4.16%		0.0624	3.19%
050	Soluble K2O (14%)	75	72	13.59	1.773	13.87	0.8650	0.4277	0.0630	3.08%	1.15	0.2040	2.68%
060	Water (Free) (%)	2	2	1.032	0.6746								
101	Acid Soluble Ca (%)	8	8	2.154	0.1271	2.140	0.3070	0.0842	0.0372	3.94%	0.64	0.0317	3.57%
121	Acid Soluble Mg (%)	12	11	0.2672	0.0790	0.2523	0.2126	0.0682	0.0257	27.01%	0.75	0.0150	4.92%
143	Elemental S (%)	5	5	4.166	2.151	4.166		2.151	1.203	51.63%		0.0515	3.23%
145	Sulfate S, HCl soluble (%)	6	6	5.189	0.1491	5.173		0.1295	0.0661	2.50%		0.0824	3.12%
148	Total S (5%)	42	41	5.096	0.3676	5.097	0.4549	0.3044	0.0594	5.97%	1.56	0.1046	3.13%
149	S - HNO3 soluble (%)	2	2	5.232	0.3046								
151	Acid Soluble As (ppm)	16	12	17.95	45.21	5.411		3.206	1.157	59.25%		0.4415	12.41%
165	Acid Soluble B (%)	7	3	0.0125	0.0168	0.0246	0.0067	0.0208	0.0150	84.49%	7.23	0.0001	6.99%
181	Acid Soluble Cd (ppm)	19	16	1.094	0.4502	1.092		0.1938	0.0606	17.75%		0.0790	15.79%
191	Acid Soluble Cr (ppm)	17	16	21.34	3.318	21.01		2.973	0.9291	14.15%		0.9971	10.12%
202	Acid Soluble Co (ppm)	16	9	1.555	2.346	0.9290	1.2787	0.3993	0.1664	42.98%	0.73	0.0596	16.17%
221	Acid Soluble Cu (%)	21	14	0.7744	2.512	0.0013	0.0051	0.0012	0.0004	90.73%	0.55	0.0011	10.84%
241	Acid Soluble Fe (%)	9	7	0.0557	0.0232	0.0594	0.0109	0.0073	0.0034	12.27%	1.55	0.0012	6.12%
251	Acid Soluble Pb (ppm)	17	10	4.973	3.522	5.073		2.005	0.7926	39.53%		0.3065	12.53%
261	Acid Soluble Mn (%)	8	6	0.0336	0.0688	0.0029	0.0053	0.0005	0.0003	17.39%	0.23	0.0002	9.62%
281	Acid Soluble Hg (ppm)	9	1	0.4295	0.7208	0.0029		0.0005	0.0006	17.39%		0.0000	22.00%
289	Acid Soluble Mo (ppm)	15	9	1.191	0.9928	1.030	1.3091	0.3277	0.1365	31.81%	0.58	0.0948	15.92%

Analyte Code	Analyte Sample # 250811	# 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)	18	15	7.074	1.690	6.488		1.307	0.4218	20.14%		0.1932	12.07%
301	Acid Soluble Se (ppm)	13	4	7.809	11.68	15.15		17.19	10.74	113.45%		14.46	10.63%
311	Sodium (%)	4	4	0.1490	0.0054	0.1490	0.0199	0.0054	0.0034	3.64%	0.64	0.0047	5.33%
321	Acid Soluble Zn (%)	25	21	1.158	5.768	0.0031	0.0053	0.0005	0.0001	15.09%	0.20	0.0005	9.55%

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 # 250811

Regular PT Scheme

Labs Reporting: 76

21-7-14

Lab Values

Issue Date : 09/30/2025

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 (%)	0368	9.203	0.2350	11.05	0.3861	0.0960	29	-4.80	001.99	0
001	Ammoniacal N (%)	0572	9.600	0.4000	11.05	0.3861	0.0960	29	-3.77	001.99	0
001	Ammoniacal N (%)	0602	9.900	0.1000	11.05	0.3861	0.0960	29	-2.99	001.10	0
001	Ammoniacal N (%)	0602	9.900	0.1000	11.05	0.3861	0.0960	29	-2.99	001.99	0
001	Ammoniacal N (%)	0389	10.40	0.3200	11.05	0.3861	0.0960	29	-1.70	001.10	0
001	Ammoniacal N (%)	0605	10.88	0.1400	11.05	0.3861	0.0960	29	-0.45	001.99	0
001	Ammoniacal N (%)	0577	10.93	0.0500	11.05	0.3861	0.0960	29	-0.34	001.99	0
001	Ammoniacal N (%)	0423	10.95	0.1000	11.05	0.3861	0.0960	29	-0.27	001.99	0
001	Ammoniacal N (%)	0136	11.00	0.0000	11.05	0.3861	0.0960	29	-0.14	001.99	0
001	Ammoniacal N (%)	0476	11.02	0.0162	11.05	0.3861	0.0960	29	-0.10	001.99	0
001	Ammoniacal N (%)	0561	11.02	0.0000	11.05	0.3861	0.0960	29	-0.09	001.99	0
001	Ammoniacal N (%)	0027	11.04	0.0200	11.05	0.3861	0.0960	29	-0.04	001.99	0
001	Ammoniacal N (%)	0394	11.06	0.0430	11.05	0.3861	0.0960	29	0.01	001.99	0
001	Ammoniacal N (%)	0548	11.09	0.0500	11.05	0.3861	0.0960	29	0.08	001.99	0
001	Ammoniacal N (%)	0559	11.09	0.0020	11.05	0.3861	0.0960	29	0.08	001.99	0
001	Ammoniacal N (%)	0653	11.09	0.0100	11.05	0.3861	0.0960	29	0.08	001.99	0
001	Ammoniacal N (%)	0405	11.09	0.0000	11.05	0.3861	0.0960	29	0.09	001.99	0
001	Ammoniacal N (%)	0513	11.10	0.0100	11.05	0.3861	0.0960	29	0.10	001.99	0
001	Ammoniacal N (%)	0558	11.10	0.2000	11.05	0.3861	0.0960	29	0.12	001.99	0
001	Ammoniacal N (%)	0510	11.13	0.0276	11.05	0.3861	0.0960	29	0.19	001.99	0
001	Ammoniacal N (%)	0536	11.16	0.1000	11.05	0.3861	0.0960	29	0.27	001.99	0
001	Ammoniacal N (%)	0600	11.19	0.1800	11.05	0.3861	0.0960	29	0.35	001.99	0
001	Ammoniacal N (%)	0220	11.21	0.0100	11.05	0.3861	0.0960	29	0.39	001.99	0
001	Ammoniacal N (%)	0553	11.23	0.0500	11.05	0.3861	0.0960	29	0.44	001.99	0
001	Ammoniacal N (%)	0647	11.35	0.1300	11.05	0.3861	0.0960	29	0.75	001.99	0
001	Ammoniacal N (%)	0545	11.62	0.0200	11.05	0.3861	0.0960	29	1.46	001.99	0
001	Ammoniacal N (%)	0498	11.85	0.3000	11.05	0.3861	0.0960	29	2.06	001.10	0
001	Ammoniacal N (%)	0472	12.00	0.0000	11.05	0.3861	0.0960	29	2.45	001.99	0
001	Ammoniacal N (%)	0612	12.45	0.1000	11.05	0.3861	0.0960	29	3.61	001.99	0
001	Ammoniacal N (%)	0524	10.80	0.5557	11.05	0.3861	0.0960	29	-0.65	001.99	1
002	Nitrate N (%)	0220	8.250	0.0000	9.744	0.3121	0.1626	21	-4.79	002.99	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				
002	Nitrate N (%)	0605	9.130	0.1200	9.744	0.3121	0.1626	21	-1.97	002.99	0
002	Nitrate N (%)	0368	9.334	0.5340	9.744	0.3121	0.1626	21	-1.31	002.99	0
002	Nitrate N (%)	0472	9.400	0.4000	9.744	0.3121	0.1626	21	-1.10	002.99	0
002	Nitrate N (%)	0029	9.495	0.1300	9.744	0.3121	0.1626	21	-0.80	002.99	0
002	Nitrate N (%)	0545	9.565	0.0100	9.744	0.3121	0.1626	21	-0.57	002.99	0
002	Nitrate N (%)	0476	9.604	0.0762	9.744	0.3121	0.1626	21	-0.45	002.99	0
002	Nitrate N (%)	0559	9.640	0.0200	9.744	0.3121	0.1626	21	-0.33	002.99	0
002	Nitrate N (%)	0653	9.650	0.0200	9.744	0.3121	0.1626	21	-0.30	002.99	0
002	Nitrate N (%)	0600	9.750	0.2200	9.744	0.3121	0.1626	21	0.02	002.99	0
002	Nitrate N (%)	0548	9.820	0.1400	9.744	0.3121	0.1626	21	0.24	002.99	0
002	Nitrate N (%)	0423	9.850	0.3000	9.744	0.3121	0.1626	21	0.34	002.99	0
002	Nitrate N (%)	0553	9.865	0.0300	9.744	0.3121	0.1626	21	0.39	002.99	0
002	Nitrate N (%)	0647	9.905	0.0700	9.744	0.3121	0.1626	21	0.52	002.99	0
002	Nitrate N (%)	0536	9.910	0.0800	9.744	0.3121	0.1626	21	0.53	002.99	0
002	Nitrate N (%)	0498	9.950	0.7000	9.744	0.3121	0.1626	21	0.66	002.99	0
002	Nitrate N (%)	0558	9.975	0.8500	9.744	0.3121	0.1626	21	0.74	002.99	0
002	Nitrate N (%)	0513	10.07	0.0300	9.744	0.3121	0.1626	21	1.03	002.99	0
002	Nitrate N (%)	0394	10.09	0.1000	9.744	0.3121	0.1626	21	1.10	002.99	0
002	Nitrate N (%)	0136	10.10	0.2000	9.744	0.3121	0.1626	21	1.14	002.99	0
002	Nitrate N (%)	0027	10.10	0.0800	9.744	0.3121	0.1626	21	1.14	002.99	0
002	Nitrate N (%)	0117	11.20	1.200	9.744	0.3121	0.1626	21	4.67	002.20	1
005	Urea N (%)	0524	0.2415	0.0425				2		005.99	0
005	Urea N (%)	0638	21.13	0.1600				2		005.99	0
010	Total N (21%)	0542	19.20†	0.1800	20.93	0.4129	0.1475	64	-4.18	010.60	0
010	Total N (21%)	0324	19.75†	0.5000	20.93	0.4129	0.1475	64	-2.85	010.60	0
010	Total N (21%)	0023	19.75†	0.0080	20.93	0.4129	0.1475	64	-2.85	010.60	0
010	Total N (21%)	0095	19.91†	0.1300	20.93	0.4129	0.1475	64	-2.47	010.60	0
010	Total N (21%)	0035	19.95†	0.1000	20.93	0.4129	0.1475	64	-2.36	010.60	0
010	Total N (21%)	0605	20.01†	0.0100	20.93	0.4129	0.1475	64	-2.23	010.99	0
010	Total N (21%)	0422	20.13†	0.0200	20.93	0.4129	0.1475	64	-1.93	010.60	0
010	Total N (21%)	0360	20.23	0.0600	20.93	0.4129	0.1475	64	-1.69	010.60	0
010	Total N (21%)	0072	20.24	0.2120	20.93	0.4129	0.1475	64	-1.66	010.60	0
010	Total N (21%)	0234	20.32	0.5800	20.93	0.4129	0.1475	64	-1.47	010.60	0
010	Total N (21%)	0055	20.37	0.1500	20.93	0.4129	0.1475	64	-1.36	010.60	0
010	Total N (21%)	0524	20.40	0.2193	20.93	0.4129	0.1475	64	-1.26	010.99	0
010	Total N (21%)	0527	20.54	0.0630	20.93	0.4129	0.1475	64	-0.94	010.60	0
010	Total N (21%)	0368	20.63	0.1170	20.93	0.4129	0.1475	64	-0.71	010.60	0
010	Total N (21%)	0389	20.67	0.0500	20.93	0.4129	0.1475	64	-0.63	010.60	0
010	Total N (21%)	0025	20.78	0.1800	20.93	0.4129	0.1475	64	-0.35	010.60	0
010	Total N (21%)	0117	20.80	0.4000	20.93	0.4129	0.1475	64	-0.31	010.12	0
010	Total N (21%)	0309	20.81	0.0900	20.93	0.4129	0.1475	64	-0.29	010.11	0
010	Total N (21%)	0169	20.85	0.0100	20.93	0.4129	0.1475	64	-0.20	010.60	0
010	Total N (21%)	0602	20.85	0.1000	20.93	0.4129	0.1475	64	-0.19	010.12	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 (21%)	0534	20.85	0.1000	20.93	0.4129	0.1475	64	-0.19	010.60	0
010	Total N (21%)	0602	20.85	0.1000	20.93	0.4129	0.1475	64	-0.19	010.99	0
010	Total N (21%)	0521	20.88	0.0000	20.93	0.4129	0.1475	64	-0.11	010.60	0
010	Total N (21%)	0423	20.89	0.1400	20.93	0.4129	0.1475	64	-0.09	010.60	0
010	Total N (21%)	0612	20.90	0.4000	20.93	0.4129	0.1475	64	-0.06	010.60	0
010	Total N (21%)	0548	20.92	0.2100	20.93	0.4129	0.1475	64	-0.03	010.10	0
010	Total N (21%)	0559	20.92	0.0100	20.93	0.4129	0.1475	64	-0.03	010.99	0
010	Total N (21%)	0653	20.93	0.0200	20.93	0.4129	0.1475	64	0.01	010.99	0
010	Total N (21%)	0029	20.94	0.5300	20.93	0.4129	0.1475	64	0.02	010.60	0
010	Total N (21%)	0600	20.94	0.4000	20.93	0.4129	0.1475	64	0.03	010.99	0
010	Total N (21%)	0543	20.96	0.0300	20.93	0.4129	0.1475	64	0.07	010.60	0
010	Total N (21%)	0510	20.99	0.1524	20.93	0.4129	0.1475	64	0.14	010.11	0
010	Total N (21%)	0451	20.99	0.2000	20.93	0.4129	0.1475	64	0.15	010.60	0
010	Total N (21%)	0049	21.00	0.2200	20.93	0.4129	0.1475	64	0.18	010.60	0
010	Total N (21%)	0220	21.00	0.0200	20.93	0.4129	0.1475	64	0.18	010.60	0
010	Total N (21%)	0292	21.00	0.0600	20.93	0.4129	0.1475	64	0.18	010.60	0
010	Total N (21%)	0561	21.02	0.0400	20.93	0.4129	0.1475	64	0.23	010.60	0
010	Total N (21%)	0405	21.04	0.0100	20.93	0.4129	0.1475	64	0.26	010.60	0
010	Total N (21%)	0043	21.05	0.0400	20.93	0.4129	0.1475	64	0.30	010.60	0
010	Total N (21%)	0354	21.05	0.1000	20.93	0.4129	0.1475	64	0.30	010.60	0
010	Total N (21%)	0536	21.07	0.1800	20.93	0.4129	0.1475	64	0.35	010.11	0
010	Total N (21%)	0624	21.07	0.8000	20.93	0.4129	0.1475	64	0.35	010.60	0
010	Total N (21%)	0494	21.08	0.0000	20.93	0.4129	0.1475	64	0.37	010.60	0
010	Total N (21%)	0377	21.09	0.1800	20.93	0.4129	0.1475	64	0.40	010.60	0
010	Total N (21%)	0558	21.10	0.6000	20.93	0.4129	0.1475	64	0.42	010.99	0
010	Total N (21%)	0177	21.13	0.0000	20.93	0.4129	0.1475	64	0.48	010.60	0
010	Total N (21%)	0394	21.15	0.0570	20.93	0.4129	0.1475	64	0.53	010.99	0
010	Total N (21%)	0307	21.15	0.1000	20.93	0.4129	0.1475	64	0.54	010.60	0
010	Total N (21%)	0513	21.16	0.0400	20.93	0.4129	0.1475	64	0.57	010.99	0
010	Total N (21%)	0027	21.18	0.0700	20.93	0.4129	0.1475	64	0.60	010.60	0
010	Total N (21%)	0545	21.19	0.0100	20.93	0.4129	0.1475	64	0.63	010.99	0
010	Total N (21%)	0009	21.20	0.2000	20.93	0.4129	0.1475	64	0.66	010.60	0
010	Total N (21%)	0040	21.25	0.3000	20.93	0.4129	0.1475	64	0.78	010.60	0
010	Total N (21%)	0615	21.25	0.7000	20.93	0.4129	0.1475	64	0.78	010.99	0
010	Total N (21%)	0647	21.25	0.2000	20.93	0.4129	0.1475	64	0.78	010.99	0
010	Total N (21%)	0291	21.28	0.0100	20.93	0.4129	0.1475	64	0.84	010.60	0
010	Total N (21%)	0498	21.30	0.8000	20.93	0.4129	0.1475	64	0.90	010.12	0
010	Total N (21%)	0402	21.38	0.4150	20.93	0.4129	0.1475	64	1.11	010.60	0
010	Total N (21%)	0131	21.46	0.1110	20.93	0.4129	0.1475	64	1.29	010.60	0
010	Total N (21%)	0472	21.53	0.0400	20.93	0.4129	0.1475	64	1.46	010.60	0
010	Total N (21%)	0584	21.57	0.2800	20.93	0.4129	0.1475	64	1.56	010.99	0
010	Total N (21%)	0136	21.65	0.1000	20.93	0.4129	0.1475	64	1.75	010.60	0
010	Total N (21%)	0255	21.89‡	0.0040	20.93	0.4129	0.1475	64	2.32	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 (21%)	0371	22.45±	0.1000	20.93	0.4129	0.1475	64	3.69	010.99	0
020	Total P2O5 (%)	0042	6.100	0.0000	6.858	0.3072	0.1419	40	-2.47	020.40	0
020	Total P2O5 (%)	0558	6.150	0.6000	6.858	0.3072	0.1419	40	-2.30	020.20	0
020	Total P2O5 (%)	0543	6.372	0.1230	6.858	0.3072	0.1419	40	-1.58	020.50	0
020	Total P2O5 (%)	0422	6.401	0.2864	6.858	0.3072	0.1419	40	-1.49	020.50	0
020	Total P2O5 (%)	0309	6.485	0.2700	6.858	0.3072	0.1419	40	-1.21	020.20	0
020	Total P2O5 (%)	0389	6.545	0.0500	6.858	0.3072	0.1419	40	-1.02	020.50	0
020	Total P2O5 (%)	0612	6.545	0.5500	6.858	0.3072	0.1419	40	-1.02	020.50	0
020	Total P2O5 (%)	0510	6.626	0.0099	6.858	0.3072	0.1419	40	-0.75	020.20	0
020	Total P2O5 (%)	0524	6.650	0.3692	6.858	0.3072	0.1419	40	-0.68	020.50	0
020	Total P2O5 (%)	0324	6.655	0.1100	6.858	0.3072	0.1419	40	-0.66	020.20	0
020	Total P2O5 (%)	0169	6.675	0.0500	6.858	0.3072	0.1419	40	-0.60	020.50	0
020	Total P2O5 (%)	0394	6.681	0.0300	6.858	0.3072	0.1419	40	-0.58	020.20	0
020	Total P2O5 (%)	0291	6.695	0.0100	6.858	0.3072	0.1419	40	-0.53	020.50	0
020	Total P2O5 (%)	0405	6.710	0.0600	6.858	0.3072	0.1419	40	-0.48	020.20	0
020	Total P2O5 (%)	0472	6.770	0.0000	6.858	0.3072	0.1419	40	-0.29	020.50	0
020	Total P2O5 (%)	0476	6.792	0.0149	6.858	0.3072	0.1419	40	-0.22	020.20	0
020	Total P2O5 (%)	0602	6.820	0.1200	6.858	0.3072	0.1419	40	-0.12	020.20	0
020	Total P2O5 (%)	0602	6.820	0.1200	6.858	0.3072	0.1419	40	-0.12	020.99	0
020	Total P2O5 (%)	0433	6.830	0.2800	6.858	0.3072	0.1419	40	-0.09	020.50	0
020	Total P2O5 (%)	0561	6.840	0.0200	6.858	0.3072	0.1419	40	-0.06	020.20	0
020	Total P2O5 (%)	0451	6.859	0.1100	6.858	0.3072	0.1419	40	0.00	020.50	0
020	Total P2O5 (%)	0534	6.890	0.0000	6.858	0.3072	0.1419	40	0.10	020.20	0
020	Total P2O5 (%)	0157	6.890	0.1200	6.858	0.3072	0.1419	40	0.10	020.50	0
020	Total P2O5 (%)	0615	6.900	0.0000	6.858	0.3072	0.1419	40	0.14	020.20	0
020	Total P2O5 (%)	0513	6.900	0.0200	6.858	0.3072	0.1419	40	0.14	020.99	0
020	Total P2O5 (%)	0255	6.970	0.0070	6.858	0.3072	0.1419	40	0.36	020.50	0
020	Total P2O5 (%)	0035	7.000	0.2000	6.858	0.3072	0.1419	40	0.46	020.40	0
020	Total P2O5 (%)	0234	7.030	0.1400	6.858	0.3072	0.1419	40	0.56	020.50	0
020	Total P2O5 (%)	0292	7.045	0.0100	6.858	0.3072	0.1419	40	0.61	020.20	0
020	Total P2O5 (%)	0402	7.065	0.0200	6.858	0.3072	0.1419	40	0.67	020.50	0
020	Total P2O5 (%)	0638	7.085	0.0700	6.858	0.3072	0.1419	40	0.74	020.99	0
020	Total P2O5 (%)	0600	7.110	0.1400	6.858	0.3072	0.1419	40	0.82	020.99	0
020	Total P2O5 (%)	0527	7.123	0.1224	6.858	0.3072	0.1419	40	0.86	020.50	0
020	Total P2O5 (%)	0423	7.140	0.2600	6.858	0.3072	0.1419	40	0.92	020.50	0
020	Total P2O5 (%)	0307	7.175	0.4100	6.858	0.3072	0.1419	40	1.03	020.50	0
020	Total P2O5 (%)	0647	7.240	0.1000	6.858	0.3072	0.1419	40	1.24	020.99	0
020	Total P2O5 (%)	0371	7.250	0.1000	6.858	0.3072	0.1419	40	1.28	020.20	0
020	Total P2O5 (%)	0368	7.280	0.0295	6.858	0.3072	0.1419	40	1.37	020.50	0
020	Total P2O5 (%)	0498	7.450	0.7000	6.858	0.3072	0.1419	40	1.93	020.20	0
020	Total P2O5 (%)	0515	7.935	0.4300	6.858	0.3072	0.1419	40	3.51	020.99	0
020	Total P2O5 (%)	0523	0.7620	0.0460	6.858	0.3072	0.1419	40	-19.84	020.50	2
030	Citrate Insoluble P2O5 (%)	0405	0.0100	0.0000	0.0433	0.0289	0.0100	3	-1.15	030.20	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				
030	Citrate Insoluble P2O5 (%)	0602	0.0600	0.0100	0.0433	0.0289	0.0100	3	0.58	030.20	0
030	Citrate Insoluble P2O5 (%)	0602	0.0600	0.0100	0.0433	0.0289	0.0100	3	0.58	030.99	0
040	Indirect Available P2O5 (7%)	0405	6.705‡	0.0500				2		040.99	0
040	Indirect Available P2O5 (7%)	0548	6.805‡	0.1900				2		040.99	0
041	Direct Available P2O5 (7%)	0521	2.962†	0.0000	6.782	0.2151	0.0902	38	-17.75	041.50	0
041	Direct Available P2O5 (7%)	0472	5.570†	0.0200	6.782	0.2151	0.0902	38	-5.63	041.21	0
041	Direct Available P2O5 (7%)	0055	5.765†	0.1500	6.782	0.2151	0.0902	38	-4.73	041.21	0
041	Direct Available P2O5 (7%)	0177	5.765†	0.0270	6.782	0.2151	0.0902	38	-4.73	041.21	0
041	Direct Available P2O5 (7%)	0095	6.185	0.2100	6.782	0.2151	0.0902	38	-2.77	041.21	0
041	Direct Available P2O5 (7%)	0624	6.410	0.1200	6.782	0.2151	0.0902	38	-1.73	041.50	0
041	Direct Available P2O5 (7%)	0072	6.590	0.1600	6.782	0.2151	0.0902	38	-0.89	041.51	0
041	Direct Available P2O5 (7%)	0220	6.620	0.0600	6.782	0.2151	0.0902	38	-0.75	041.11	0
041	Direct Available P2O5 (7%)	0394	6.677	0.0500	6.782	0.2151	0.0902	38	-0.49	041.21	0
041	Direct Available P2O5 (7%)	0377	6.690	0.3600	6.782	0.2151	0.0902	38	-0.43	041.51	0
041	Direct Available P2O5 (7%)	0136	6.700	0.4000	6.782	0.2151	0.0902	38	-0.38	041.51	0
041	Direct Available P2O5 (7%)	0405	6.715	0.0100	6.782	0.2151	0.0902	38	-0.31	041.11	0
041	Direct Available P2O5 (7%)	0009	6.725	0.1300	6.782	0.2151	0.0902	38	-0.26	041.10	0
041	Direct Available P2O5 (7%)	0055	6.735	0.0500	6.782	0.2151	0.0902	38	-0.22	041.11	0
041	Direct Available P2O5 (7%)	0025	6.750	0.0200	6.782	0.2151	0.0902	38	-0.15	041.51	0
041	Direct Available P2O5 (7%)	0602	6.765	0.1100	6.782	0.2151	0.0902	38	-0.08	041.20	0
041	Direct Available P2O5 (7%)	0602	6.765	0.1100	6.782	0.2151	0.0902	38	-0.08	041.99	0
041	Direct Available P2O5 (7%)	0494	6.770	0.1600	6.782	0.2151	0.0902	38	-0.05	041.10	0
041	Direct Available P2O5 (7%)	0131	6.770	0.0600	6.782	0.2151	0.0902	38	-0.05	041.50	0
041	Direct Available P2O5 (7%)	0029	6.775	0.0900	6.782	0.2151	0.0902	38	-0.03	041.40	0
041	Direct Available P2O5 (7%)	0177	6.793	0.0360	6.782	0.2151	0.0902	38	0.05	041.10	0
041	Direct Available P2O5 (7%)	0034	6.819	0.0050	6.782	0.2151	0.0902	38	0.17	041.40	0
041	Direct Available P2O5 (7%)	0043	6.821	0.0190	6.782	0.2151	0.0902	38	0.18	041.51	0
041	Direct Available P2O5 (7%)	0513	6.825	0.0300	6.782	0.2151	0.0902	38	0.20	041.11	0
041	Direct Available P2O5 (7%)	0547	6.850	0.1000	6.782	0.2151	0.0902	38	0.32	041.51	0
041	Direct Available P2O5 (7%)	0360	6.875	0.0500	6.782	0.2151	0.0902	38	0.43	041.51	0
041	Direct Available P2O5 (7%)	0553	6.900	0.0800	6.782	0.2151	0.0902	38	0.55	041.20	0
041	Direct Available P2O5 (7%)	0600	6.920	0.1200	6.782	0.2151	0.0902	38	0.64	041.99	0
041	Direct Available P2O5 (7%)	0605	6.945	0.1500	6.782	0.2151	0.0902	38	0.76	041.50	0
041	Direct Available P2O5 (7%)	0653	6.945	0.0100	6.782	0.2151	0.0902	38	0.76	041.99	0
041	Direct Available P2O5 (7%)	0559	6.955	0.0100	6.782	0.2151	0.0902	38	0.80	041.99	0
041	Direct Available P2O5 (7%)	0545	6.980	0.0800	6.782	0.2151	0.0902	38	0.92	041.99	0
041	Direct Available P2O5 (7%)	0040	7.000	0.2000	6.782	0.2151	0.0902	38	1.01	041.51	0
041	Direct Available P2O5 (7%)	0027	7.005	0.1900	6.782	0.2151	0.0902	38	1.04	041.51	0
041	Direct Available P2O5 (7%)	0494	7.020	0.0400	6.782	0.2151	0.0902	38	1.11	041.51	0
041	Direct Available P2O5 (7%)	0023	7.052	0.0330	6.782	0.2151	0.0902	38	1.25	041.51	0
041	Direct Available P2O5 (7%)	0536	7.100	0.0400	6.782	0.2151	0.0902	38	1.48	041.10	0
041	Direct Available P2O5 (7%)	0584	7.475‡	0.2500	6.782	0.2151	0.0902	38	3.22	041.99	0
041	Direct Available P2O5 (7%)	0049	6.665	0.5500	6.782	0.2151	0.0902	38	-0.54	041.11	1

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 (7%)	0354	13.60†	0.0000	6.782	0.2151	0.0902	38	31.69	041.21	2
042	Water Soluble OrthoP As P2O5 (%)	0577	7.270	0.3400				1		042.99	0
048	Water Soluble P2O5 (%)	0394	4.291	0.0020	4.521	0.1883	0.0624	5	-1.22	048.20	0
048	Water Soluble P2O5 (%)	0602	4.475	0.1100	4.521	0.1883	0.0624	5	-0.25	048.20	0
048	Water Soluble P2O5 (%)	0602	4.475	0.1100	4.521	0.1883	0.0624	5	-0.25	048.99	0
048	Water Soluble P2O5 (%)	0472	4.555	0.0300	4.521	0.1883	0.0624	5	0.18	048.20	0
048	Water Soluble P2O5 (%)	0513	4.810	0.0600	4.521	0.1883	0.0624	5	1.53	048.99	0
050	Soluble K2O (14%)	0354	6.420†	0.1200	13.87	0.4277	0.2040	72	-17.43	050.52	0
050	Soluble K2O (14%)	0521	11.44†	0.0000	13.87	0.4277	0.2040	72	-5.69	050.51	0
050	Soluble K2O (14%)	0371	12.10†	0.2000	13.87	0.4277	0.2040	72	-4.15	050.99	0
050	Soluble K2O (14%)	0472	12.53†	0.1300	13.87	0.4277	0.2040	72	-3.15	050.32	0
050	Soluble K2O (14%)	0543	12.55†	0.0840	13.87	0.4277	0.2040	72	-3.09	050.52	0
050	Soluble K2O (14%)	0072	12.69†	0.1000	13.87	0.4277	0.2040	72	-2.77	050.52	0
050	Soluble K2O (14%)	0515	12.92†	0.3500	13.87	0.4277	0.2040	72	-2.24	050.99	0
050	Soluble K2O (14%)	0255	12.99†	0.7700	13.87	0.4277	0.2040	72	-2.06	050.99	0
050	Soluble K2O (14%)	0389	13.11	0.2400	13.87	0.4277	0.2040	72	-1.79	050.99	0
050	Soluble K2O (14%)	0049	13.21	0.3500	13.87	0.4277	0.2040	72	-1.56	050.00	0
050	Soluble K2O (14%)	0157	13.35	0.3000	13.87	0.4277	0.2040	72	-1.23	050.99	0
050	Soluble K2O (14%)	0309	13.41	0.0500	13.87	0.4277	0.2040	72	-1.10	050.60	0
050	Soluble K2O (14%)	0029	13.42	0.0900	13.87	0.4277	0.2040	72	-1.07	050.62	0
050	Soluble K2O (14%)	0043	13.51	0.0600	13.87	0.4277	0.2040	72	-0.85	050.52	0
050	Soluble K2O (14%)	0377	13.59	0.5400	13.87	0.4277	0.2040	72	-0.66	050.52	0
050	Soluble K2O (14%)	0612	13.60	0.6000	13.87	0.4277	0.2040	72	-0.64	050.99	0
050	Soluble K2O (14%)	0040	13.65	0.5000	13.87	0.4277	0.2040	72	-0.52	050.52	0
050	Soluble K2O (14%)	0177	13.67	0.1109	13.87	0.4277	0.2040	72	-0.49	050.52	0
050	Soluble K2O (14%)	0494	13.69	0.2900	13.87	0.4277	0.2040	72	-0.44	050.00	0
050	Soluble K2O (14%)	0615	13.70	0.6000	13.87	0.4277	0.2040	72	-0.41	050.99	0
050	Soluble K2O (14%)	0451	13.72	0.1200	13.87	0.4277	0.2040	72	-0.36	050.99	0
050	Soluble K2O (14%)	0027	13.73	0.0300	13.87	0.4277	0.2040	72	-0.35	050.52	0
050	Soluble K2O (14%)	0292	13.73	0.0200	13.87	0.4277	0.2040	72	-0.34	050.50	0
050	Soluble K2O (14%)	0577	13.77	0.5700	13.87	0.4277	0.2040	72	-0.26	050.99	0
050	Soluble K2O (14%)	0095	13.77	0.7200	13.87	0.4277	0.2040	72	-0.24	050.62	0
050	Soluble K2O (14%)	0169	13.78	0.0500	13.87	0.4277	0.2040	72	-0.23	050.50	0
050	Soluble K2O (14%)	0072	13.78	0.0110	13.87	0.4277	0.2040	72	-0.22	050.00	0
050	Soluble K2O (14%)	0220	13.80	0.0300	13.87	0.4277	0.2040	72	-0.18	050.00	0
050	Soluble K2O (14%)	0394	13.80	0.0530	13.87	0.4277	0.2040	72	-0.18	050.99	0
050	Soluble K2O (14%)	0157	13.80	0.4000	13.87	0.4277	0.2040	72	-0.17	050.30	0
050	Soluble K2O (14%)	0433	13.83	0.1700	13.87	0.4277	0.2040	72	-0.11	050.99	0
050	Soluble K2O (14%)	0055	13.83	0.2500	13.87	0.4277	0.2040	72	-0.10	050.00	0
050	Soluble K2O (14%)	0360	13.85	0.0800	13.87	0.4277	0.2040	72	-0.06	050.52	0
050	Soluble K2O (14%)	0034	13.87	0.0450	13.87	0.4277	0.2040	72	-0.01	050.62	0
050	Soluble K2O (14%)	0055	13.90	0.2200	13.87	0.4277	0.2040	72	0.05	050.50	0
050	Soluble K2O (14%)	0498	13.90	0.2000	13.87	0.4277	0.2040	72	0.06	050.99	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				
050	Soluble K2O (14%)	0513	13.91	0.0300	13.87	0.4277	0.2040	72	0.07	050.52	0
050	Soluble K2O (14%)	0638	13.93	0.0700	13.87	0.4277	0.2040	72	0.12	050.99	0
050	Soluble K2O (14%)	0559	13.93	0.0200	13.87	0.4277	0.2040	72	0.13	050.99	0
050	Soluble K2O (14%)	0653	13.93	0.0200	13.87	0.4277	0.2040	72	0.13	050.99	0
050	Soluble K2O (14%)	0136	13.95	0.5000	13.87	0.4277	0.2040	72	0.18	050.52	0
050	Soluble K2O (14%)	0605	13.98	0.2200	13.87	0.4277	0.2040	72	0.25	050.99	0
050	Soluble K2O (14%)	0324	14.00	0.2000	13.87	0.4277	0.2040	72	0.29	050.50	0
050	Soluble K2O (14%)	0494	14.00	0.0200	13.87	0.4277	0.2040	72	0.29	050.52	0
050	Soluble K2O (14%)	0291	14.02	0.0100	13.87	0.4277	0.2040	72	0.33	050.51	0
050	Soluble K2O (14%)	0510	14.02	0.0017	13.87	0.4277	0.2040	72	0.34	050.60	0
050	Soluble K2O (14%)	0553	14.03	0.0900	13.87	0.4277	0.2040	72	0.35	050.99	0
050	Soluble K2O (14%)	0534	14.05	0.6700	13.87	0.4277	0.2040	72	0.40	050.99	0
050	Soluble K2O (14%)	0035	14.05	0.3000	13.87	0.4277	0.2040	72	0.41	050.61	0
050	Soluble K2O (14%)	0600	14.05	0.3000	13.87	0.4277	0.2040	72	0.41	050.99	0
050	Soluble K2O (14%)	0023	14.06	0.0800	13.87	0.4277	0.2040	72	0.43	050.52	0
050	Soluble K2O (14%)	0402	14.06	0.1480	13.87	0.4277	0.2040	72	0.43	050.99	0
050	Soluble K2O (14%)	0545	14.08	0.1100	13.87	0.4277	0.2040	72	0.47	050.99	0
050	Soluble K2O (14%)	0025	14.10	0.4100	13.87	0.4277	0.2040	72	0.52	050.52	0
050	Soluble K2O (14%)	0602	14.15	0.1000	13.87	0.4277	0.2040	72	0.65	050.00	0
050	Soluble K2O (14%)	0602	14.15	0.1000	13.87	0.4277	0.2040	72	0.65	050.60	0
050	Soluble K2O (14%)	0602	14.15	0.1000	13.87	0.4277	0.2040	72	0.65	050.99	0
050	Soluble K2O (14%)	0624	14.16	0.3100	13.87	0.4277	0.2040	72	0.66	050.99	0
050	Soluble K2O (14%)	0423	14.16	0.3960	13.87	0.4277	0.2040	72	0.67	050.52	0
050	Soluble K2O (14%)	0536	14.18	0.2700	13.87	0.4277	0.2040	72	0.70	050.99	0
050	Soluble K2O (14%)	0234	14.26	0.2800	13.87	0.4277	0.2040	72	0.90	050.99	0
050	Soluble K2O (14%)	0476	14.28	0.1090	13.87	0.4277	0.2040	72	0.95	050.60	0
050	Soluble K2O (14%)	0405	14.30	0.1100	13.87	0.4277	0.2040	72	0.98	050.00	0
050	Soluble K2O (14%)	0548	14.30	0.4300	13.87	0.4277	0.2040	72	0.98	050.60	0
050	Soluble K2O (14%)	0527	14.42	0.1363	13.87	0.4277	0.2040	72	1.29	050.99	0
050	Soluble K2O (14%)	0647	14.54	0.2400	13.87	0.4277	0.2040	72	1.56	050.99	0
050	Soluble K2O (14%)	0584	14.60	0.3800	13.87	0.4277	0.2040	72	1.70	050.99	0
050	Soluble K2O (14%)	0042	14.65	0.3000	13.87	0.4277	0.2040	72	1.81	050.99	0
050	Soluble K2O (14%)	0561	14.99‡	0.0300	13.87	0.4277	0.2040	72	2.60	050.00	0
050	Soluble K2O (14%)	0368	15.09‡	0.4739	13.87	0.4277	0.2040	72	2.84	050.51	0
050	Soluble K2O (14%)	0422	15.72‡	0.1687	13.87	0.4277	0.2040	72	4.32	050.50	0
050	Soluble K2O (14%)	0131	15.99‡	0.1400	13.87	0.4277	0.2040	72	4.95	050.51	0
050	Soluble K2O (14%)	0307	13.50	1.200	13.87	0.4277	0.2040	72	-0.87	050.99	1
050	Soluble K2O (14%)	0524	13.90	1.736	13.87	0.4277	0.2040	72	0.07	050.99	1
050	Soluble K2O (14%)	0523	1.592†	0.0820	13.87	0.4277	0.2040	72	-28.71	050.99	2
060	Water (Free) (%)	0513	0.5550	0.0300				2		060.00	0
060	Water (Free) (%)	0510	1.509	0.0145				2		060.99	0
101	Acid Soluble Ca (%)	0423	1.975	0.0100	2.140	0.0842	0.0317	8	-1.79	101.32	0
101	Acid Soluble Ca (%)	0354	2.100	0.0400	2.140	0.0842	0.0317	8	-0.43	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 (%)	0009	2.100	0.0000	2.140	0.0842	0.0317	8	-0.43	101.33	0
101	Acid Soluble Ca (%)	0402	2.134	0.0390	2.140	0.0842	0.0317	8	-0.07	101.30	0
101	Acid Soluble Ca (%)	0494	2.144	0.0361	2.140	0.0842	0.0317	8	0.04	101.33	0
101	Acid Soluble Ca (%)	0035	2.155	0.0500	2.140	0.0842	0.0317	8	0.17	101.30	0
101	Acid Soluble Ca (%)	0472	2.205	0.0100	2.140	0.0842	0.0317	8	0.71	101.33	0
101	Acid Soluble Ca (%)	0527	2.422	0.0368	2.140	0.0842	0.0317	8	3.07	101.33	0
121	Acid Soluble Mg (%)	0515	0.1723	0.0223	0.2523	0.0682	0.0150	11	-1.17	121.99	0
121	Acid Soluble Mg (%)	0371	0.2000	0.0000	0.2523	0.0682	0.0150	11	-0.77	121.30	0
121	Acid Soluble Mg (%)	0524	0.2144	0.0086	0.2523	0.0682	0.0150	11	-0.56	121.99	0
121	Acid Soluble Mg (%)	0354	0.2250	0.0100	0.2523	0.0682	0.0150	11	-0.40	121.30	0
121	Acid Soluble Mg (%)	0009	0.2280	0.0080	0.2523	0.0682	0.0150	11	-0.36	121.33	0
121	Acid Soluble Mg (%)	0035	0.2295	0.0090	0.2523	0.0682	0.0150	11	-0.34	121.30	0
121	Acid Soluble Mg (%)	0494	0.2334	0.0245	0.2523	0.0682	0.0150	11	-0.28	121.33	0
121	Acid Soluble Mg (%)	0527	0.2641	0.0069	0.2523	0.0682	0.0150	11	0.17	121.33	0
121	Acid Soluble Mg (%)	0472	0.3000	0.0200	0.2523	0.0682	0.0150	11	0.70	121.33	0
121	Acid Soluble Mg (%)	0402	0.4090	0.0120	0.2523	0.0682	0.0150	11	2.30	121.30	0
121	Acid Soluble Mg (%)	0498	0.4200	0.0400	0.2523	0.0682	0.0150	11	2.46	121.03	0
121	Acid Soluble Mg (%)	0515	0.3108	0.1876	0.2523	0.0682	0.0150	11	0.86	121.33	1
143	Elemental S (%)	0405	0.3480	0.0180	4.166	2.151	0.0515	5	-1.78	143.00	0
143	Elemental S (%)	0255	4.693	0.0460	4.166	2.151	0.0515	5	0.24	143.99	0
143	Elemental S (%)	0291	5.100	0.0200	4.166	2.151	0.0515	5	0.43	143.99	0
143	Elemental S (%)	0368	5.336	0.0035	4.166	2.151	0.0515	5	0.54	143.99	0
143	Elemental S (%)	0389	5.355	0.1700	4.166	2.151	0.0515	5	0.55	143.99	0
145	Sulfate S, HCl soluble (%)	0405	5.020	0.0200	5.173	0.1295	0.0824	6	-1.05	145.00	0
145	Sulfate S, HCl soluble (%)	0553	5.120	0.1200	5.173	0.1295	0.0824	6	-0.37	145.99	0
145	Sulfate S, HCl soluble (%)	0600	5.150	0.1000	5.173	0.1295	0.0824	6	-0.16	145.99	0
145	Sulfate S, HCl soluble (%)	0027	5.185	0.0300	5.173	0.1295	0.0824	6	0.08	145.00	0
145	Sulfate S, HCl soluble (%)	0476	5.196	0.1745	5.173	0.1295	0.0824	6	0.16	145.00	0
145	Sulfate S, HCl soluble (%)	0561	5.465	0.0500	5.173	0.1295	0.0824	6	2.01	145.00	0
148	Total S (5%)	0558	4.205†	0.1500	5.097	0.3044	0.1046	41	-2.93	148.99	0
148	Total S (5%)	0292	4.485†	0.0100	5.097	0.3044	0.1046	41	-2.01	148.07	0
148	Total S (5%)	0377	4.550†	0.1400	5.097	0.3044	0.1046	41	-1.80	148.99	0
148	Total S (5%)	0543	4.608†	0.0730	5.097	0.3044	0.1046	41	-1.61	148.07	0
148	Total S (5%)	0177	4.746	0.0383	5.097	0.3044	0.1046	41	-1.15	148.07	0
148	Total S (5%)	0472	4.835	0.0300	5.097	0.3044	0.1046	41	-0.86	148.07	0
148	Total S (5%)	0534	4.875	0.0500	5.097	0.3044	0.1046	41	-0.73	148.01	0
148	Total S (5%)	0602	4.900	0.1000	5.097	0.3044	0.1046	41	-0.65	148.03	0
148	Total S (5%)	0040	4.900	0.2000	5.097	0.3044	0.1046	41	-0.65	148.07	0
148	Total S (5%)	0602	4.900	0.1000	5.097	0.3044	0.1046	41	-0.65	148.99	0
148	Total S (5%)	0624	4.910	0.0400	5.097	0.3044	0.1046	41	-0.62	148.07	0
148	Total S (5%)	0612	4.925	0.4100	5.097	0.3044	0.1046	41	-0.57	148.07	0
148	Total S (5%)	0371	4.950	0.1000	5.097	0.3044	0.1046	41	-0.48	148.99	0
148	Total S (5%)	0157	4.955	0.0500	5.097	0.3044	0.1046	41	-0.47	148.00	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				
148	Total S (5%)	0494	4.976	0.4510	5.097	0.3044	0.1046	41	-0.40	148.07	0
148	Total S (5%)	0049	4.998	0.0366	5.097	0.3044	0.1046	41	-0.33	148.00	0
148	Total S (5%)	0136	5.000	0.0000	5.097	0.3044	0.1046	41	-0.32	148.07	0
148	Total S (5%)	0169	5.005	0.0700	5.097	0.3044	0.1046	41	-0.30	148.07	0
148	Total S (5%)	0498	5.040	0.1200	5.097	0.3044	0.1046	41	-0.19	148.01	0
148	Total S (5%)	0023	5.042	0.0490	5.097	0.3044	0.1046	41	-0.18	148.99	0
148	Total S (5%)	0043	5.073	0.1010	5.097	0.3044	0.1046	41	-0.08	148.07	0
148	Total S (5%)	0354	5.090	0.1000	5.097	0.3044	0.1046	41	-0.02	148.99	0
148	Total S (5%)	0647	5.100	0.0400	5.097	0.3044	0.1046	41	0.01	148.99	0
148	Total S (5%)	0605	5.105	0.0300	5.097	0.3044	0.1046	41	0.03	148.99	0
148	Total S (5%)	0559	5.145	0.0100	5.097	0.3044	0.1046	41	0.16	148.99	0
148	Total S (5%)	0055	5.170	0.0000	5.097	0.3044	0.1046	41	0.24	148.01	0
148	Total S (5%)	0324	5.190	0.4600	5.097	0.3044	0.1046	41	0.30	148.01	0
148	Total S (5%)	0394	5.197	0.0538	5.097	0.3044	0.1046	41	0.33	148.07	0
148	Total S (5%)	0307	5.200	0.0000	5.097	0.3044	0.1046	41	0.34	148.99	0
148	Total S (5%)	0402	5.230	0.0330	5.097	0.3044	0.1046	41	0.43	148.07	0
148	Total S (5%)	0029	5.275	0.2170	5.097	0.3044	0.1046	41	0.58	148.00	0
148	Total S (5%)	0072	5.340	0.0200	5.097	0.3044	0.1046	41	0.80	148.99	0
148	Total S (5%)	0405	5.365	0.0300	5.097	0.3044	0.1046	41	0.88	148.99	0
148	Total S (5%)	0548	5.380	0.1600	5.097	0.3044	0.1046	41	0.93	148.01	0
148	Total S (5%)	0584	5.455	0.3300	5.097	0.3044	0.1046	41	1.18	148.01	0
148	Total S (5%)	0515	5.470	0.6600	5.097	0.3044	0.1046	41	1.22	148.07	0
148	Total S (5%)	0131	5.510	0.1800	5.097	0.3044	0.1046	41	1.36	148.00	0
148	Total S (5%)	0513	5.515	0.0500	5.097	0.3044	0.1046	41	1.37	148.07	0
148	Total S (5%)	0422	5.694‡	0.2020	5.097	0.3044	0.1046	41	1.96	148.99	0
148	Total S (5%)	0527	5.744‡	0.1153	5.097	0.3044	0.1046	41	2.12	148.07	0
148	Total S (5%)	0220	6.300‡	0.0000	5.097	0.3044	0.1046	41	3.95	148.99	0
148	Total S (5%)	0025	4.665	0.8300	5.097	0.3044	0.1046	41	-1.42	148.00	1
149	S - HNO3 soluble (%)	0423	5.017	0.1220				2		149.04	0
149	S - HNO3 soluble (%)	0524	5.448	0.0229				2		149.04	0
151	Acid Soluble As (ppm)	0498	1.150	0.1000	5.411	3.206	0.4415	12	-1.33	151.00	0
151	Acid Soluble As (ppm)	0136	2.800	0.2000	5.411	3.206	0.4415	12	-0.81	151.33	0
151	Acid Soluble As (ppm)	0524	2.923	0.4096	5.411	3.206	0.4415	12	-0.78	151.30	0
151	Acid Soluble As (ppm)	0548	3.180	0.1600	5.411	3.206	0.4415	12	-0.70	151.33	0
151	Acid Soluble As (ppm)	0527	3.893	0.0162	5.411	3.206	0.4415	12	-0.47	151.33	0
151	Acid Soluble As (ppm)	0220	4.600	0.2600	5.411	3.206	0.4415	12	-0.25	151.32	0
151	Acid Soluble As (ppm)	0220	4.655	0.1300	5.411	3.206	0.4415	12	-0.24	151.99	0
151	Acid Soluble As (ppm)	0515	6.995	11.01	5.411	3.206	0.4415	12	0.49	151.34	0
151	Acid Soluble As (ppm)	0009	7.400	0.9400	5.411	3.206	0.4415	12	0.62	151.33	0
151	Acid Soluble As (ppm)	0405	8.500	1.000	5.411	3.206	0.4415	12	0.96	151.32	0
151	Acid Soluble As (ppm)	0368	9.200	0.0000	5.411	3.206	0.4415	12	1.18	151.34	0
151	Acid Soluble As (ppm)	0009	9.640	0.5200	5.411	3.206	0.4415	12	1.32	151.99	0
151	Acid Soluble As (ppm)	0515	30.45	36.10	5.411	3.206	0.4415	12	7.81	151.33	1

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
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151	Acid Soluble As (ppm)	0558	185.5	3.000	5.411	3.206	0.4415	12	56.17	151.99	2
151	Acid Soluble As (ppm)	0255	0.0000	0.0000	5.411	3.206	0.4415	12		151.30	4
151	Acid Soluble As (ppm)	0605	< 6.25		5.411	3.206	0.4415	12		151.30	5
165	Acid Soluble B (%)	0524	0.0006	0.0000	0.0246	0.0208	0.0001	3	-0.94	165.99	0
165	Acid Soluble B (%)	0559	0.0366	0.0001	0.0246	0.0208	0.0001	3	0.47	165.99	0
165	Acid Soluble B (%)	0653	0.0366	0.0001	0.0246	0.0208	0.0001	3	0.47	165.99	0
165	Acid Soluble B (%)	0371	0.0000	0.0000	0.0246	0.0208	0.0001	3		165.30	4
165	Acid Soluble B (%)	0527	< 0.001		0.0246	0.0208	0.0001	3		165.99	5
165	Acid Soluble B (%)	0009	< 0.0025		0.0246	0.0208	0.0001	3		165.99	5
165	Acid Soluble B (%)	0354	< 0.01		0.0246	0.0208	0.0001	3		165.30	5
181	Acid Soluble Cd (ppm)	0220	0.7150	0.0100	1.092	0.1938	0.0790	16	-1.94	181.99	0
181	Acid Soluble Cd (ppm)	0220	0.8300	0.2200	1.092	0.1938	0.0790	16	-1.35	181.32	0
181	Acid Soluble Cd (ppm)	0086	0.9868	0.0787	1.092	0.1938	0.0790	16	-0.54	181.33	0
181	Acid Soluble Cd (ppm)	0498	1.000	0.0000	1.092	0.1938	0.0790	16	-0.47	181.00	0
181	Acid Soluble Cd (ppm)	0405	1.000	0.0000	1.092	0.1938	0.0790	16	-0.47	181.32	0
181	Acid Soluble Cd (ppm)	0524	1.005	0.0051	1.092	0.1938	0.0790	16	-0.45	181.30	0
181	Acid Soluble Cd (ppm)	0548	1.030	0.0400	1.092	0.1938	0.0790	16	-0.32	181.33	0
181	Acid Soluble Cd (ppm)	0605	1.035	0.0100	1.092	0.1938	0.0790	16	-0.29	181.30	0
181	Acid Soluble Cd (ppm)	0534	1.050	0.1410	1.092	0.1938	0.0790	16	-0.22	181.99	0
181	Acid Soluble Cd (ppm)	0394	1.109	0.0310	1.092	0.1938	0.0790	16	0.09	181.30	0
181	Acid Soluble Cd (ppm)	0136	1.150	0.1000	1.092	0.1938	0.0790	16	0.30	181.33	0
181	Acid Soluble Cd (ppm)	0255	1.197	0.0970	1.092	0.1938	0.0790	16	0.54	181.30	0
181	Acid Soluble Cd (ppm)	0035	1.210	0.0200	1.092	0.1938	0.0790	16	0.61	181.30	0
181	Acid Soluble Cd (ppm)	0009	1.300	0.0000	1.092	0.1938	0.0790	16	1.07	181.99	0
181	Acid Soluble Cd (ppm)	0368	1.700	0.2000	1.092	0.1938	0.0790	16	3.14	181.34	0
181	Acid Soluble Cd (ppm)	0527	1.948	0.1088	1.092	0.1938	0.0790	16	4.42	181.33	0
181	Acid Soluble Cd (ppm)	0515	< 0.19		1.092	0.1938	0.0790	16		181.33	5
181	Acid Soluble Cd (ppm)	0515	< 0.33		1.092	0.1938	0.0790	16		181.34	5
181	Acid Soluble Cd (ppm)	0009	< 2		1.092	0.1938	0.0790	16		181.33	5
191	Acid Soluble Cr (ppm)	0524	14.55	2.194	21.01	2.973	0.9971	16	-2.17	191.30	0
191	Acid Soluble Cr (ppm)	0368	17.10	0.0000	21.01	2.973	0.9971	16	-1.32	191.34	0
191	Acid Soluble Cr (ppm)	0548	17.49	0.5400	21.01	2.973	0.9971	16	-1.18	191.33	0
191	Acid Soluble Cr (ppm)	0394	19.20	0.0370	21.01	2.973	0.9971	16	-0.61	191.30	0
191	Acid Soluble Cr (ppm)	0035	19.45	0.9000	21.01	2.973	0.9971	16	-0.53	191.30	0
191	Acid Soluble Cr (ppm)	0136	19.70	0.4000	21.01	2.973	0.9971	16	-0.44	191.33	0
191	Acid Soluble Cr (ppm)	0515	20.40	14.80	21.01	2.973	0.9971	16	-0.21	191.34	0
191	Acid Soluble Cr (ppm)	0605	20.97	0.2800	21.01	2.973	0.9971	16	-0.01	191.30	0
191	Acid Soluble Cr (ppm)	0494	21.65	2.100	21.01	2.973	0.9971	16	0.21	191.33	0
191	Acid Soluble Cr (ppm)	0220	22.10	0.2000	21.01	2.973	0.9971	16	0.37	191.99	0
191	Acid Soluble Cr (ppm)	0220	22.50	0.2000	21.01	2.973	0.9971	16	0.50	191.32	0
191	Acid Soluble Cr (ppm)	0405	23.00	0.0000	21.01	2.973	0.9971	16	0.67	191.32	0
191	Acid Soluble Cr (ppm)	0527	23.12	0.7938	21.01	2.973	0.9971	16	0.71	191.33	0
191	Acid Soluble Cr (ppm)	0009	23.20	0.6000	21.01	2.973	0.9971	16	0.74	191.33	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
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191	Acid Soluble Cr (ppm)	0498	24.30	1.800	21.01	2.973	0.9971	16	1.11	191.00	0
191	Acid Soluble Cr (ppm)	0009	27.15	1.500	21.01	2.973	0.9971	16	2.06	191.99	0
191	Acid Soluble Cr (ppm)	0515	26.95	24.30	21.01	2.973	0.9971	16	2.00	191.33	1
202	Acid Soluble Co (ppm)	0368	0.3500	0.1000	0.9290	0.3993	0.0596	9	-1.45	202.34	0
202	Acid Soluble Co (ppm)	0035	0.6610	0.0520	0.9290	0.3993	0.0596	9	-0.67	202.30	0
202	Acid Soluble Co (ppm)	0220	0.6950	0.0300	0.9290	0.3993	0.0596	9	-0.59	202.99	0
202	Acid Soluble Co (ppm)	0220	0.7900	0.0000	0.9290	0.3993	0.0596	9	-0.35	202.32	0
202	Acid Soluble Co (ppm)	0548	0.9450	0.0500	0.9290	0.3993	0.0596	9	0.04	202.33	0
202	Acid Soluble Co (ppm)	0405	1.000	0.0000	0.9290	0.3993	0.0596	9	0.18	202.32	0
202	Acid Soluble Co (ppm)	0605	1.085	0.1300	0.9290	0.3993	0.0596	9	0.39	202.30	0
202	Acid Soluble Co (ppm)	0009	1.375	0.0300	0.9290	0.3993	0.0596	9	1.12	202.99	0
202	Acid Soluble Co (ppm)	0524	1.460	0.0323	0.9290	0.3993	0.0596	9	1.33	202.30	0
202	Acid Soluble Co (ppm)	0527	1.440	0.2466	0.9290	0.3993	0.0596	9	1.28	202.33	1
202	Acid Soluble Co (ppm)	0255	0.0000	0.0000	0.9290	0.3993	0.0596	9		202.99	4
202	Acid Soluble Co (ppm)	0515	< 0.26		0.9290	0.3993	0.0596	9		202.33	5
202	Acid Soluble Co (ppm)	0515	< 0.324		0.9290	0.3993	0.0596	9		202.34	5
202	Acid Soluble Co (ppm)	0009	< 2		0.9290	0.3993	0.0596	9		202.33	5
202	Acid Soluble Co (ppm)	0136	< 2.5		0.9290	0.3993	0.0596	9		202.33	5
202	Acid Soluble Co (ppm)	0086	< 10		0.9290	0.3993	0.0596	9		202.33	5
221	Acid Soluble Cu (%)	0548	0.0005	0.0000	0.0013	0.0012	0.0011	14	-0.69	221.33	0
221	Acid Soluble Cu (%)	0524	0.0005	0.0000	0.0013	0.0012	0.0011	14	-0.69	221.99	0
221	Acid Soluble Cu (%)	0394	0.0006	0.0001	0.0013	0.0012	0.0011	14	-0.64	221.33	0
221	Acid Soluble Cu (%)	0405	0.0006	0.0000	0.0013	0.0012	0.0011	14	-0.60	221.32	0
221	Acid Soluble Cu (%)	0368	0.0007	0.0001	0.0013	0.0012	0.0011	14	-0.56	221.99	0
221	Acid Soluble Cu (%)	0009	0.0007	0.0000	0.0013	0.0012	0.0011	14	-0.52	221.99	0
221	Acid Soluble Cu (%)	0136	0.0008	0.0001	0.0013	0.0012	0.0011	14	-0.48	221.33	0
221	Acid Soluble Cu (%)	0527	0.0008	0.0001	0.0013	0.0012	0.0011	14	-0.48	221.33	0
221	Acid Soluble Cu (%)	0035	0.0009	0.0003	0.0013	0.0012	0.0011	14	-0.40	221.30	0
221	Acid Soluble Cu (%)	0559	0.0010	0.0000	0.0013	0.0012	0.0011	14	-0.27	221.99	0
221	Acid Soluble Cu (%)	0624	0.0028	0.0010	0.0013	0.0012	0.0011	14	1.23	221.33	0
221	Acid Soluble Cu (%)	0515	0.0029	0.0039	0.0013	0.0012	0.0011	14	1.27	221.33	0
221	Acid Soluble Cu (%)	0402	0.0030	0.0000	0.0013	0.0012	0.0011	14	1.39	221.30	0
221	Acid Soluble Cu (%)	0515	0.0031	0.0035	0.0013	0.0012	0.0011	14	1.43	221.99	0
221	Acid Soluble Cu (%)	0605	6.230	0.1600	0.0013	0.0012	0.0011	14	5181.41	221.99	1
221	Acid Soluble Cu (%)	0255	0.0000	0.0000	0.0013	0.0012	0.0011	14		221.30	4
221	Acid Soluble Cu (%)	0371	0.0000	0.0000	0.0013	0.0012	0.0011	14		221.30	4
221	Acid Soluble Cu (%)	0027	< 0.001		0.0013	0.0012	0.0011	14		221.33	5
221	Acid Soluble Cu (%)	0009	< 0.0025		0.0013	0.0012	0.0011	14		221.33	5
221	Acid Soluble Cu (%)	0354	< 0.01		0.0013	0.0012	0.0011	14		221.30	5
221	Acid Soluble Cu (%)	0086	< 10		0.0013	0.0012	0.0011	14		221.33	5
241	Acid Soluble Fe (%)	0559	0.0514	0.0001	0.0594	0.0073	0.0012	7	-1.00	241.99	0
241	Acid Soluble Fe (%)	0035	0.0535	0.0010	0.0594	0.0073	0.0012	7	-0.74	241.30	0
241	Acid Soluble Fe (%)	0524	0.0563	0.0056	0.0594	0.0073	0.0012	7	-0.39	241.99	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				
241	Acid Soluble Fe (%)	0009	0.0595	0.0008	0.0594	0.0073	0.0012	7	0.01	241.33	0
241	Acid Soluble Fe (%)	0472	0.0600	0.0000	0.0594	0.0073	0.0012	7	0.07	241.33	0
241	Acid Soluble Fe (%)	0527	0.0669	0.0015	0.0594	0.0073	0.0012	7	0.92	241.33	0
241	Acid Soluble Fe (%)	0402	0.0685	0.0010	0.0594	0.0073	0.0012	7	1.13	241.30	0
241	Acid Soluble Fe (%)	0354	0.0850	0.0300	0.0594	0.0073	0.0012	7	3.17	241.30	1
241	Acid Soluble Fe (%)	0371	0.0000	0.0000	0.0594	0.0073	0.0012	7		241.30	4
251	Acid Soluble Pb (ppm)	0548	3.230	0.1400	5.073	2.005	0.3065	10	-0.92	251.33	0
251	Acid Soluble Pb (ppm)	0524	3.607	0.3306	5.073	2.005	0.3065	10	-0.73	251.30	0
251	Acid Soluble Pb (ppm)	0527	3.835	0.0207	5.073	2.005	0.3065	10	-0.62	251.33	0
251	Acid Soluble Pb (ppm)	0605	4.110	0.0200	5.073	2.005	0.3065	10	-0.48	251.30	0
251	Acid Soluble Pb (ppm)	0394	4.149	0.0190	5.073	2.005	0.3065	10	-0.46	251.30	0
251	Acid Soluble Pb (ppm)	0220	4.750	0.3000	5.073	2.005	0.3065	10	-0.16	251.99	0
251	Acid Soluble Pb (ppm)	0220	4.805	0.1300	5.073	2.005	0.3065	10	-0.13	251.32	0
251	Acid Soluble Pb (ppm)	0035	6.080	0.4200	5.073	2.005	0.3065	10	0.50	251.30	0
251	Acid Soluble Pb (ppm)	0515	8.875	6.850	5.073	2.005	0.3065	10	1.90	251.34	0
251	Acid Soluble Pb (ppm)	0368	11.35	1.900	5.073	2.005	0.3065	10	3.13	251.34	0
251	Acid Soluble Pb (ppm)	0515	13.75	10.41	5.073	2.005	0.3065	10	4.32	251.33	1
251	Acid Soluble Pb (ppm)	0255	0.0000	0.0000	5.073	2.005	0.3065	10		251.30	4
251	Acid Soluble Pb (ppm)	0498	< 0.5		5.073	2.005	0.3065	10		251.00	5
251	Acid Soluble Pb (ppm)	0009	< 2.5		5.073	2.005	0.3065	10		251.99	5
251	Acid Soluble Pb (ppm)	0136	< 3		5.073	2.005	0.3065	10		251.33	5
251	Acid Soluble Pb (ppm)	0405	< 4		5.073	2.005	0.3065	10		251.32	5
251	Acid Soluble Pb (ppm)	0009	< 6		5.073	2.005	0.3065	10		251.33	5
261	Acid Soluble Mn (%)	0524	0.0025	0.0002	0.0029	0.0005	0.0002	6	-0.77	261.99	0
261	Acid Soluble Mn (%)	0009	0.0025	0.0000	0.0029	0.0005	0.0002	6	-0.77	261.35	0
261	Acid Soluble Mn (%)	0527	0.0029	0.0001	0.0029	0.0005	0.0002	6	-0.16	261.35	0
261	Acid Soluble Mn (%)	0035	0.0030	0.0000	0.0029	0.0005	0.0002	6	0.10	261.30	0
261	Acid Soluble Mn (%)	0494	0.0031	0.0000	0.0029	0.0005	0.0002	6	0.27	261.35	0
261	Acid Soluble Mn (%)	0371	0.2000	0.0000	0.0029	0.0005	0.0002	6	342.88	261.32	0
261	Acid Soluble Mn (%)	0559	0.0445	0.0010	0.0029	0.0005	0.0002	6	72.31	261.99	1
261	Acid Soluble Mn (%)	0354	< 0.01		0.0029	0.0005	0.0002	6		261.30	5
281	Acid Soluble Hg (ppm)	0524	0.0007	0.0002				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)	0009	< 0.044					1		281.99	5
281	Acid Soluble Hg (ppm)	0534	< 0.05					1		281.00	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	0.4435	0.2330	1.030	0.3277	0.0948	9	-1.79	289.30	0
289	Acid Soluble Mo (ppm)	0255	0.5935	0.0730	1.030	0.3277	0.0948	9	-1.33	289.30	0
289	Acid Soluble Mo (ppm)	0405	1.000	0.0000	1.030	0.3277	0.0948	9	-0.09	289.32	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				
289	Acid Soluble Mo (ppm)	0220	1.055	0.0300	1.030	0.3277	0.0948	9	0.08	289.99	0
289	Acid Soluble Mo (ppm)	0548	1.085	0.0500	1.030	0.3277	0.0948	9	0.17	289.33	0
289	Acid Soluble Mo (ppm)	0220	1.095	0.0700	1.030	0.3277	0.0948	9	0.20	289.32	0
289	Acid Soluble Mo (ppm)	0524	1.241	0.2132	1.030	0.3277	0.0948	9	0.64	289.30	0
289	Acid Soluble Mo (ppm)	0605	1.330	0.0600	1.030	0.3277	0.0948	9	0.91	289.30	0
289	Acid Soluble Mo (ppm)	0009	1.335	0.0300	1.030	0.3277	0.0948	9	0.93	289.99	0
289	Acid Soluble Mo (ppm)	0527	1.605	0.3948	1.030	0.3277	0.0948	9	1.75	289.33	1
289	Acid Soluble Mo (ppm)	0368	< 0.1		1.030	0.3277	0.0948	9		289.34	5
289	Acid Soluble Mo (ppm)	0515	< 0.23		1.030	0.3277	0.0948	9		289.33	5
289	Acid Soluble Mo (ppm)	0515	< 0.255		1.030	0.3277	0.0948	9		289.34	5
289	Acid Soluble Mo (ppm)	0136	< 2.5		1.030	0.3277	0.0948	9		289.33	5
289	Acid Soluble Mo (ppm)	0009	< 4		1.030	0.3277	0.0948	9		289.33	5
291	Acid Soluble Ni (ppm)	0035	4.735	0.1500	6.488	1.307	0.1932	15	-1.34	291.30	0
291	Acid Soluble Ni (ppm)	0524	4.861	0.0084	6.488	1.307	0.1932	15	-1.25	291.30	0
291	Acid Soluble Ni (ppm)	0548	5.460	0.1400	6.488	1.307	0.1932	15	-0.79	291.33	0
291	Acid Soluble Ni (ppm)	0394	5.546	0.1243	6.488	1.307	0.1932	15	-0.72	291.30	0
291	Acid Soluble Ni (ppm)	0605	5.950	0.3800	6.488	1.307	0.1932	15	-0.41	291.30	0
291	Acid Soluble Ni (ppm)	0009	6.065	0.0500	6.488	1.307	0.1932	15	-0.32	291.33	0
291	Acid Soluble Ni (ppm)	0255	6.238	1.442	6.488	1.307	0.1932	15	-0.19	291.99	0
291	Acid Soluble Ni (ppm)	0220	6.375	0.0100	6.488	1.307	0.1932	15	-0.09	291.32	0
291	Acid Soluble Ni (ppm)	0220	6.400	0.1400	6.488	1.307	0.1932	15	-0.07	291.99	0
291	Acid Soluble Ni (ppm)	0527	6.676	0.0165	6.488	1.307	0.1932	15	0.14	291.33	0
291	Acid Soluble Ni (ppm)	0009	7.015	0.0100	6.488	1.307	0.1932	15	0.40	291.99	0
291	Acid Soluble Ni (ppm)	0136	7.300	0.6000	6.488	1.307	0.1932	15	0.62	291.33	0
291	Acid Soluble Ni (ppm)	0368	7.800	0.2000	6.488	1.307	0.1932	15	1.00	291.34	0
291	Acid Soluble Ni (ppm)	0405	8.500	3.000	6.488	1.307	0.1932	15	1.54	291.32	0
291	Acid Soluble Ni (ppm)	0494	9.625	0.0500	6.488	1.307	0.1932	15	2.40	291.30	0
291	Acid Soluble Ni (ppm)	0515	8.780	4.840	6.488	1.307	0.1932	15	1.75	291.34	1
291	Acid Soluble Ni (ppm)	0498	< 10		6.488	1.307	0.1932	15		291.00	5
291	Acid Soluble Ni (ppm)	0086	< 10		6.488	1.307	0.1932	15		291.33	5
301	Acid Soluble Se (ppm)	0524	2.096	0.5155	15.15	17.19	14.46	4	-0.76	301.30	0
301	Acid Soluble Se (ppm)	0548	3.005	0.1100	15.15	17.19	14.46	4	-0.71	301.33	0
301	Acid Soluble Se (ppm)	0009	16.55	3.500	15.15	17.19	14.46	4	0.08	301.99	0
301	Acid Soluble Se (ppm)	0515	38.95	53.70	15.15	17.19	14.46	4	1.38	301.33	0
301	Acid Soluble Se (ppm)	0255	0.0000	0.0000	15.15	17.19	14.46	4		301.99	4
301	Acid Soluble Se (ppm)	0527	< 0.01		15.15	17.19	14.46	4		301.33	5
301	Acid Soluble Se (ppm)	0220	< 0.3		15.15	17.19	14.46	4		301.32	5
301	Acid Soluble Se (ppm)	0220	< 0.3		15.15	17.19	14.46	4		301.99	5
301	Acid Soluble Se (ppm)	0515	< 0.554		15.15	17.19	14.46	4		301.34	5
301	Acid Soluble Se (ppm)	0368	< 1.5		15.15	17.19	14.46	4		301.34	5
301	Acid Soluble Se (ppm)	0605	< 6.25		15.15	17.19	14.46	4		301.30	5
301	Acid Soluble Se (ppm)	0405	< 10		15.15	17.19	14.46	4		301.32	5
301	Acid Soluble Se (ppm)	0009	< 22		15.15	17.19	14.46	4		301.33	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				
311	Sodium (%)	0035	0.1435	0.0010	0.1490	0.0054	0.0047	4	-1.02	311.33	0
311	Sodium (%)	0009	0.1455	0.0070	0.1490	0.0054	0.0047	4	-0.65	311.33	0
311	Sodium (%)	0527	0.1522	0.0007	0.1490	0.0054	0.0047	4	0.57	311.33	0
311	Sodium (%)	0354	0.1550	0.0100	0.1490	0.0054	0.0047	4	1.10	311.99	0
321	Acid Soluble Zn (%)	0515	0.0019	0.0021	0.0031	0.0005	0.0005	21	-2.65	321.33	0
321	Acid Soluble Zn (%)	0220	0.0024	0.0004	0.0031	0.0005	0.0005	21	-1.47	321.99	0
321	Acid Soluble Zn (%)	0559	0.0024	0.0002	0.0031	0.0005	0.0005	21	-1.47	321.99	0
321	Acid Soluble Zn (%)	0653	0.0025	0.0001	0.0031	0.0005	0.0005	21	-1.36	321.99	0
321	Acid Soluble Zn (%)	0527	0.0030	0.0001	0.0031	0.0005	0.0005	21	-0.29	321.33	0
321	Acid Soluble Zn (%)	0035	0.0030	0.0000	0.0031	0.0005	0.0005	21	-0.18	321.30	0
321	Acid Soluble Zn (%)	0255	0.0030	0.0000	0.0031	0.0005	0.0005	21	-0.18	321.30	0
321	Acid Soluble Zn (%)	0043	0.0030	0.0000	0.0031	0.0005	0.0005	21	-0.18	321.33	0
321	Acid Soluble Zn (%)	0136	0.0030	0.0000	0.0031	0.0005	0.0005	21	-0.18	321.33	0
321	Acid Soluble Zn (%)	0548	0.0030	0.0000	0.0031	0.0005	0.0005	21	-0.18	321.33	0
321	Acid Soluble Zn (%)	0405	0.0031	0.0002	0.0031	0.0005	0.0005	21	0.04	321.32	0
321	Acid Soluble Zn (%)	0368	0.0032	0.0003	0.0031	0.0005	0.0005	21	0.14	321.99	0
321	Acid Soluble Zn (%)	0086	0.0032	0.0000	0.0031	0.0005	0.0005	21	0.25	321.33	0
321	Acid Soluble Zn (%)	0524	0.0033	0.0001	0.0031	0.0005	0.0005	21	0.36	321.99	0
321	Acid Soluble Zn (%)	0009	0.0033	0.0002	0.0031	0.0005	0.0005	21	0.47	321.33	0
321	Acid Soluble Zn (%)	0394	0.0033	0.0000	0.0031	0.0005	0.0005	21	0.47	321.33	0
321	Acid Soluble Zn (%)	0515	0.0034	0.0003	0.0031	0.0005	0.0005	21	0.57	321.99	0
321	Acid Soluble Zn (%)	0220	0.0035	0.0005	0.0031	0.0005	0.0005	21	0.79	321.32	0
321	Acid Soluble Zn (%)	0027	0.0035	0.0010	0.0031	0.0005	0.0005	21	0.90	321.33	0
321	Acid Soluble Zn (%)	0402	0.0045	0.0010	0.0031	0.0005	0.0005	21	3.05	321.30	0
321	Acid Soluble Zn (%)	0624	0.0355	0.0010	0.0031	0.0005	0.0005	21	69.69	321.33	0
321	Acid Soluble Zn (%)	0605	28.85	1.130	0.0031	0.0005	0.0005	21	62007.87	321.99	1
321	Acid Soluble Zn (%)	0371	0.0000	0.0000	0.0031	0.0005	0.0005	21		321.30	4
321	Acid Soluble Zn (%)	0498	< 0.01		0.0031	0.0005	0.0005	21		321.03	5
321	Acid Soluble Zn (%)	0354	< 0.01		0.0031	0.0005	0.0005	21		321.30	5

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.