



Analyte PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Analytes: 29

Sample # 250611

Regular PT Scheme

Labs Reporting: 77

Calcium Nitrate

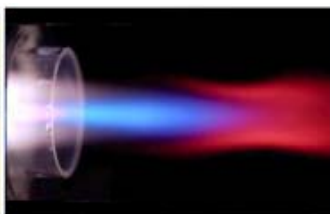
Statistical Summary

Issue Date : 07/31/2025

Analyte Code	Analyte Sample # 250611	# 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 (%)	28	27	1.167	0.0978	1.166		0.0899	0.0216	7.71%		0.0409	3.91%
002	Nitrate N (%)	24	23	13.99	0.9997	14.08		0.8898	0.2319	6.32%		0.1151	2.67%
005	Urea N (%)	1		0.0292									
010	Total N (15.5%)	66	65	14.86	1.323	15.01	0.6503	0.5455	0.0846	3.63%	1.95	0.1659	2.58%
020	Total P2O5 (%)	4	3	0.0285	0.0253	0.0346		0.0271	0.0196	78.31%		0.0050	6.64%
041	Direct Available P2O5 (%)	3	3	0.0647	0.0175	0.0647	0.6700	0.0175	0.0126	27.02%	0.06	0.0140	6.04%
048	Water Soluble P2O5 (%)	1		0.0100									
050	Soluble K2O (%)	6	5	0.0559	0.0536	0.0651	0.4100	0.0544	0.0304	83.56%	0.31	0.0793	6.03%
060	Water (Free) (%)	1		0.6350									
101	Acid Soluble Ca (19%)	59	58	18.94	0.7177	18.89	1.0000	0.6558	0.1076	3.47%	1.53	0.2338	2.30%
121	Acid Soluble Mg (%)	8	6	0.0212	0.0167	0.0154	0.2008	0.0082	0.0042	53.26%	0.10	0.0012	7.49%
148	Total S (%)	4	3	0.0804	0.0510	0.0739	0.2037	0.0604	0.0436	81.75%	0.69	0.0104	5.92%
149	S - HNO3 soluble (%)	1		0.0021									
151	Acid Soluble As (ppm)	17	5	4.176	7.191	9.782		11.13	6.223	113.81%		2.645	11.35%
165	Acid Soluble B (%)	8	7	0.0155	0.0180	0.0098	0.0045	0.0030	0.0014	30.54%	1.56	0.0002	8.02%
181	Acid Soluble Cd (ppm)	18	6	0.8423	2.305	0.1835		0.1970	0.1005	107.36%		0.0170	20.65%
191	Acid Soluble Cr (ppm)	15	6	1.646	2.569	1.129		1.603	0.8178	142.01%		0.3103	15.71%
202	Acid Soluble Co (ppm)	14	6	1.916	2.813	0.8044	1.2413	0.9242	0.4717	114.90%	1.73	0.2868	16.53%
221	Acid Soluble Cu (%)	18	7	0.0160	0.0610	0.0004	0.0050	0.0005	0.0002	124.36%	0.22	0.0001	13.06%
241	Acid Soluble Fe (%)	6	3	0.0023	0.0038	0.0010	0.0051	0.0008	0.0006	83.55%	0.36	0.0002	11.40%
251	Acid Soluble Pb (ppm)	17	5	2.626	4.658	3.668		7.595	4.246	207.08%		0.5473	13.15%
261	Acid Soluble Mn (%)	6	4	0.0019	0.0040	0.0003	0.0050	0.0001	0.0000	21.88%	0.03	0.0001	13.65%
281	Acid Soluble Hg (ppm)	8	0	0.5463	0.7256	0.0003		0.0001		21.88%		0.0000	22.00%
289	Acid Soluble Mo (ppm)	13	2	13.57	46.56	84.35	26.3060	119.0	105.2	141.08%	10.54	8.503	8.21%
291	Acid Soluble Ni (ppm)	15	6	3.123	4.755	1.524		2.190	1.118	143.72%		0.0743	15.01%
301	Acid Soluble Se (ppm)	14	4	4.275	6.743	7.491		11.21	7.005	149.62%		1.838	11.81%
311	Sodium (%)	4	4	0.0296	0.0143	0.0296	0.0080	0.0143	0.0089	48.15%	4.17	0.0014	6.79%
321	Acid Soluble Zn (%)	21	10	0.0186	0.0498	0.0021	0.0052	0.0021	0.0008	102.50%	0.96	0.0003	10.12%
325	Water Soluble Zn (%)	1		0.0000									

Analyte Code	Analyte Sample # 250611	# 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
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The Analyte IA Ratio = 2.33 * Robust SD / 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 usin the Thompson Modification, Analyst,2000,125,385-386.



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Analytes: 29

Sample # 250611

Regular PT Scheme

Labs Reporting: 77

Calcium Nitrate

Lab Values

Issue Date : 07/31/2025

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 (%)	0538	1.000	0.0200	1.166	0.0899	0.0409	27	-1.85	001.99	0
001	Ammoniacal N (%)	0602	1.035	0.0100	1.166	0.0899	0.0409	27	-1.46	001.99	0
001	Ammoniacal N (%)	0584	1.045	0.0300	1.166	0.0899	0.0409	27	-1.35	001.99	0
001	Ammoniacal N (%)	0389	1.075	0.0100	1.166	0.0899	0.0409	27	-1.01	001.10	0
001	Ammoniacal N (%)	0476	1.078	0.0648	1.166	0.0899	0.0409	27	-0.98	001.99	0
001	Ammoniacal N (%)	0423	1.085	0.0300	1.166	0.0899	0.0409	27	-0.90	001.99	0
001	Ammoniacal N (%)	0371	1.100	0.0000	1.166	0.0899	0.0409	27	-0.74	001.99	0
001	Ammoniacal N (%)	0559	1.105	0.0100	1.166	0.0899	0.0409	27	-0.68	001.99	0
001	Ammoniacal N (%)	0513	1.140	0.0000	1.166	0.0899	0.0409	27	-0.29	001.99	0
001	Ammoniacal N (%)	0545	1.150	0.0200	1.166	0.0899	0.0409	27	-0.18	001.99	0
001	Ammoniacal N (%)	0394	1.155	0.0700	1.166	0.0899	0.0409	27	-0.12	001.99	0
001	Ammoniacal N (%)	0255	1.160	0.0000	1.166	0.0899	0.0409	27	-0.07	001.99	0
001	Ammoniacal N (%)	0220	1.165	0.0100	1.166	0.0899	0.0409	27	-0.01	001.99	0
001	Ammoniacal N (%)	0027	1.170	0.0100	1.166	0.0899	0.0409	27	0.04	001.10	0
001	Ammoniacal N (%)	0169	1.178	0.0050	1.166	0.0899	0.0409	27	0.13	001.99	0
001	Ammoniacal N (%)	0563	1.185	0.0900	1.166	0.0899	0.0409	27	0.21	001.99	0
001	Ammoniacal N (%)	0524	1.191	0.0966	1.166	0.0899	0.0409	27	0.28	001.99	0
001	Ammoniacal N (%)	0498	1.200	0.0000	1.166	0.0899	0.0409	27	0.38	001.10	0
001	Ammoniacal N (%)	0136	1.200	0.0000	1.166	0.0899	0.0409	27	0.38	001.99	0
001	Ammoniacal N (%)	0472	1.200	0.0000	1.166	0.0899	0.0409	27	0.38	001.99	0
001	Ammoniacal N (%)	0452	1.205	0.0500	1.166	0.0899	0.0409	27	0.43	001.10	0
001	Ammoniacal N (%)	0481	1.205	0.0100	1.166	0.0899	0.0409	27	0.43	001.99	0
001	Ammoniacal N (%)	0117	1.240	0.1400	1.166	0.0899	0.0409	27	0.82	001.10	0
001	Ammoniacal N (%)	0548	1.290	0.2400	1.166	0.0899	0.0409	27	1.38	001.99	0
001	Ammoniacal N (%)	0368	1.295	0.0100	1.166	0.0899	0.0409	27	1.43	001.99	0
001	Ammoniacal N (%)	0405	1.325	0.0300	1.166	0.0899	0.0409	27	1.77	001.99	0
001	Ammoniacal N (%)	0605	1.450	0.0800	1.166	0.0899	0.0409	27	3.16	001.99	0
001	Ammoniacal N (%)	0517	1.040	0.2800	1.166	0.0899	0.0409	27	-1.40	001.99	1
002	Nitrate N (%)	0368	11.45	0.4900	14.08	0.8898	0.1151	23	-2.96	002.99	0
002	Nitrate N (%)	0452	11.85	0.1700	14.08	0.8898	0.1151	23	-2.51	002.99	0
002	Nitrate N (%)	0472	12.50	1.000	14.08	0.8898	0.1151	23	-1.77	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 (%)	0563	13.06	0.3200	14.08	0.8898	0.1151	23	-1.14	002.99	0
002	Nitrate N (%)	0545	13.08	0.0400	14.08	0.8898	0.1151	23	-1.12	002.99	0
002	Nitrate N (%)	0029	13.37	0.0200	14.08	0.8898	0.1151	23	-0.79	002.99	0
002	Nitrate N (%)	0513	13.80	0.0700	14.08	0.8898	0.1151	23	-0.32	002.99	0
002	Nitrate N (%)	0394	13.87	0.0700	14.08	0.8898	0.1151	23	-0.24	002.99	0
002	Nitrate N (%)	0027	14.03	0.0900	14.08	0.8898	0.1151	23	-0.06	002.99	0
002	Nitrate N (%)	0517	14.18	0.0500	14.08	0.8898	0.1151	23	0.11	002.99	0
002	Nitrate N (%)	0553	14.24	0.0300	14.08	0.8898	0.1151	23	0.18	002.99	0
002	Nitrate N (%)	0602	14.27	0.0700	14.08	0.8898	0.1151	23	0.21	002.99	0
002	Nitrate N (%)	0423	14.30	0.2000	14.08	0.8898	0.1151	23	0.25	002.99	0
002	Nitrate N (%)	0476	14.37	0.0428	14.08	0.8898	0.1151	23	0.33	002.99	0
002	Nitrate N (%)	0605	14.41	0.1400	14.08	0.8898	0.1151	23	0.37	002.99	0
002	Nitrate N (%)	0371	14.50	0.0000	14.08	0.8898	0.1151	23	0.48	002.99	0
002	Nitrate N (%)	0538	14.51	0.0300	14.08	0.8898	0.1151	23	0.48	002.99	0
002	Nitrate N (%)	0498	14.60	0.4000	14.08	0.8898	0.1151	23	0.59	002.99	0
002	Nitrate N (%)	0584	14.65	0.1200	14.08	0.8898	0.1151	23	0.64	002.99	0
002	Nitrate N (%)	0481	14.80	0.0400	14.08	0.8898	0.1151	23	0.81	002.99	0
002	Nitrate N (%)	0220	15.04	0.0100	14.08	0.8898	0.1151	23	1.08	002.99	0
002	Nitrate N (%)	0547	15.10	0.2000	14.08	0.8898	0.1151	23	1.15	002.99	0
002	Nitrate N (%)	0559	15.58	0.0100	14.08	0.8898	0.1151	23	1.68	002.99	0
002	Nitrate N (%)	0136	14.38	1.250	14.08	0.8898	0.1151	23	0.33	002.99	1
005	Urea N (%)	0524	0.0292	0.0047				1		005.99	0
010	Total N (15.5%)	0422	8.125†	0.0100	15.01	0.5455	0.1659	65	-12.63	010.60	0
010	Total N (15.5%)	0086	11.88†	0.0210	15.01	0.5455	0.1659	65	-5.74	010.60	0
010	Total N (15.5%)	0472	11.94†	0.3000	15.01	0.5455	0.1659	65	-5.63	010.60	0
010	Total N (15.5%)	0324	12.55†	0.5000	15.01	0.5455	0.1659	65	-4.52	010.60	0
010	Total N (15.5%)	0035	13.05†	0.1000	15.01	0.5455	0.1659	65	-3.60	010.60	0
010	Total N (15.5%)	0095	13.13†	0.0200	15.01	0.5455	0.1659	65	-3.45	010.60	0
010	Total N (15.5%)	0234	13.62†	0.2500	15.01	0.5455	0.1659	65	-2.56	010.60	0
010	Total N (15.5%)	0354	13.65†	0.1000	15.01	0.5455	0.1659	65	-2.50	010.60	0
010	Total N (15.5%)	0368	14.11†	0.3550	15.01	0.5455	0.1659	65	-1.66	010.60	0
010	Total N (15.5%)	0545	14.23†	0.0600	15.01	0.5455	0.1659	65	-1.44	010.99	0
010	Total N (15.5%)	0563	14.24†	0.2400	15.01	0.5455	0.1659	65	-1.42	010.99	0
010	Total N (15.5%)	0527	14.27†	0.0760	15.01	0.5455	0.1659	65	-1.37	010.60	0
010	Total N (15.5%)	0106	14.62	0.4700	15.01	0.5455	0.1659	65	-0.73	010.60	0
010	Total N (15.5%)	0524	14.65	0.4385	15.01	0.5455	0.1659	65	-0.67	010.99	0
010	Total N (15.5%)	0561	14.72	0.0000	15.01	0.5455	0.1659	65	-0.54	010.60	0
010	Total N (15.5%)	0169	14.78	0.0600	15.01	0.5455	0.1659	65	-0.43	010.60	0
010	Total N (15.5%)	0040	14.80	0.2000	15.01	0.5455	0.1659	65	-0.39	010.60	0
010	Total N (15.5%)	0389	14.85	0.0700	15.01	0.5455	0.1659	65	-0.31	010.60	0
010	Total N (15.5%)	0377	14.87	0.6300	15.01	0.5455	0.1659	65	-0.27	010.60	0
010	Total N (15.5%)	0233	14.88	0.0500	15.01	0.5455	0.1659	65	-0.25	010.60	0
010	Total N (15.5%)	0543	14.88	0.4100	15.01	0.5455	0.1659	65	-0.25	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 (15.5%)	0260	14.89	0.2900	15.01	0.5455	0.1659	65	-0.24	010.60	0
010	Total N (15.5%)	0513	14.94	0.0700	15.01	0.5455	0.1659	65	-0.14	010.99	0
010	Total N (15.5%)	0405	14.95	0.0600	15.01	0.5455	0.1659	65	-0.12	010.60	0
010	Total N (15.5%)	0521	14.95	0.0000	15.01	0.5455	0.1659	65	-0.12	010.60	0
010	Total N (15.5%)	0615	14.95	0.1000	15.01	0.5455	0.1659	65	-0.12	010.99	0
010	Total N (15.5%)	0049	15.00	0.3700	15.01	0.5455	0.1659	65	-0.03	010.60	0
010	Total N (15.5%)	0394	15.02	0.0000	15.01	0.5455	0.1659	65	0.01	010.99	0
010	Total N (15.5%)	0255	15.02	0.0670	15.01	0.5455	0.1659	65	0.01	010.60	0
010	Total N (15.5%)	0034	15.03	0.0700	15.01	0.5455	0.1659	65	0.02	010.60	0
010	Total N (15.5%)	0131	15.05	0.2200	15.01	0.5455	0.1659	65	0.06	010.60	0
010	Total N (15.5%)	0577	15.07	0.2500	15.01	0.5455	0.1659	65	0.09	010.99	0
010	Total N (15.5%)	0055	15.08	0.0350	15.01	0.5455	0.1659	65	0.12	010.60	0
010	Total N (15.5%)	0027	15.09	0.0500	15.01	0.5455	0.1659	65	0.13	010.60	0
010	Total N (15.5%)	0292	15.09	0.0600	15.01	0.5455	0.1659	65	0.14	010.60	0
010	Total N (15.5%)	0481	15.15	0.3000	15.01	0.5455	0.1659	65	0.25	010.60	0
010	Total N (15.5%)	0029	15.16	0.1700	15.01	0.5455	0.1659	65	0.26	010.60	0
010	Total N (15.5%)	0612	15.16	0.2200	15.01	0.5455	0.1659	65	0.27	010.60	0
010	Total N (15.5%)	0452	15.18	0.3300	15.01	0.5455	0.1659	65	0.30	010.60	0
010	Total N (15.5%)	0624	15.18	0.0400	15.01	0.5455	0.1659	65	0.30	010.60	0
010	Total N (15.5%)	0309	15.18	0.0600	15.01	0.5455	0.1659	65	0.30	010.11	0
010	Total N (15.5%)	0542	15.18	0.2800	15.01	0.5455	0.1659	65	0.30	010.60	0
010	Total N (15.5%)	0220	15.21	0.0100	15.01	0.5455	0.1659	65	0.35	010.60	0
010	Total N (15.5%)	0494	15.22	0.2700	15.01	0.5455	0.1659	65	0.37	010.60	0
010	Total N (15.5%)	0307	15.24	0.1200	15.01	0.5455	0.1659	65	0.41	010.60	0
010	Total N (15.5%)	0517	15.25	0.1600	15.01	0.5455	0.1659	65	0.43	010.99	0
010	Total N (15.5%)	0523	15.27	0.1020	15.01	0.5455	0.1659	65	0.47	010.60	0
010	Total N (15.5%)	0481	15.29	0.1100	15.01	0.5455	0.1659	65	0.50	010.99	0
010	Total N (15.5%)	0602	15.30	0.0800	15.01	0.5455	0.1659	65	0.52	010.12	0
010	Total N (15.5%)	0602	15.30	0.0800	15.01	0.5455	0.1659	65	0.52	010.99	0
010	Total N (15.5%)	0177	15.31	0.0340	15.01	0.5455	0.1659	65	0.54	010.60	0
010	Total N (15.5%)	0043	15.36	0.2300	15.01	0.5455	0.1659	65	0.63	010.60	0
010	Total N (15.5%)	0007	15.42	0.0300	15.01	0.5455	0.1659	65	0.74	010.60	0
010	Total N (15.5%)	0291	15.42	0.0100	15.01	0.5455	0.1659	65	0.74	010.60	0
010	Total N (15.5%)	0423	15.43	0.1100	15.01	0.5455	0.1659	65	0.75	010.60	0
010	Total N (15.5%)	0538	15.50	0.2000	15.01	0.5455	0.1659	65	0.89	010.99	0
010	Total N (15.5%)	0451	15.53	0.3300	15.01	0.5455	0.1659	65	0.94	010.60	0
010	Total N (15.5%)	0371	15.60	0.0000	15.01	0.5455	0.1659	65	1.07	010.99	0
010	Total N (15.5%)	0559	15.68‡	0.0100	15.01	0.5455	0.1659	65	1.21	010.99	0
010	Total N (15.5%)	0568	15.70‡	0.0000	15.01	0.5455	0.1659	65	1.26	010.12	0
010	Total N (15.5%)	0498	15.80‡	0.4000	15.01	0.5455	0.1659	65	1.44	010.12	0
010	Total N (15.5%)	0605	15.86‡	0.2200	15.01	0.5455	0.1659	65	1.55	010.99	0
010	Total N (15.5%)	0025	16.02‡	0.0100	15.01	0.5455	0.1659	65	1.84	010.60	0
010	Total N (15.5%)	0548	16.19‡	0.1900	15.01	0.5455	0.1659	65	2.15	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 (15.5%)	0402	19.52†	0.5780	15.01	0.5455	0.1659	65	8.26	010.60	0
010	Total N (15.5%)	0136	16.05†	1.100	15.01	0.5455	0.1659	65	1.90	010.60	1
020	Total P2O5 (%)	0524	0.0130	0.0016	0.0346	0.0271	0.0050	3	-0.80	020.50	0
020	Total P2O5 (%)	0422	0.0258	0.0034	0.0346	0.0271	0.0050	3	-0.32	020.50	0
020	Total P2O5 (%)	0472	0.0650	0.0100	0.0346	0.0271	0.0050	3	1.12	020.50	0
020	Total P2O5 (%)	0527	< 0.01		0.0346	0.0271	0.0050	3		020.50	5
041	Direct Available P2O5 (%)	0472	0.0500	0.0000	0.0647	0.0175	0.0140	3	-0.84	041.21	0
041	Direct Available P2O5 (%)	0568	0.0600	0.0000	0.0647	0.0175	0.0140	3	-0.27	041.21	0
041	Direct Available P2O5 (%)	0354	0.0840	0.0140	0.0647	0.0175	0.0140	3	1.11	041.21	0
048	Water Soluble P2O5 (%)	0472	0.0100	0.0000				1		048.20	0
050	Soluble K2O (%)	0354	0.0020	0.0020	0.0651	0.0544	0.0793	5	-1.01	050.52	0
050	Soluble K2O (%)	0472	0.0200	0.0000	0.0651	0.0544	0.0793	5	-0.72	050.32	0
050	Soluble K2O (%)	0568	0.0800	0.0000	0.0651	0.0544	0.0793	5	0.24	050.51	0
050	Soluble K2O (%)	0422	0.0867	0.0045	0.0651	0.0544	0.0793	5	0.35	050.50	0
050	Soluble K2O (%)	0524	0.1367	0.2313	0.0651	0.0544	0.0793	5	1.15	050.99	0
050	Soluble K2O (%)	0527	< 0.01		0.0651	0.0544	0.0793	5		050.99	5
060	Water (Free) (%)	0513	0.6350	0.0100				1		060.00	0
101	Acid Soluble Ca (19%)	0042	17.41†	0.5100	18.89	0.6558	0.2338	58	-2.26	101.99	0
101	Acid Soluble Ca (19%)	0177	17.44†	0.2415	18.89	0.6558	0.2338	58	-2.22	101.33	0
101	Acid Soluble Ca (19%)	0389	17.82†	0.1700	18.89	0.6558	0.2338	58	-1.64	101.99	0
101	Acid Soluble Ca (19%)	0095	17.90	0.9300	18.89	0.6558	0.2338	58	-1.52	101.32	0
101	Acid Soluble Ca (19%)	0106	17.96	0.4341	18.89	0.6558	0.2338	58	-1.42	101.33	0
101	Acid Soluble Ca (19%)	0494	18.07	0.5647	18.89	0.6558	0.2338	58	-1.25	101.33	0
101	Acid Soluble Ca (19%)	0568	18.10	0.0000	18.89	0.6558	0.2338	58	-1.20	101.30	0
101	Acid Soluble Ca (19%)	0029	18.14	0.1600	18.89	0.6558	0.2338	58	-1.14	101.33	0
101	Acid Soluble Ca (19%)	0292	18.26	0.0500	18.89	0.6558	0.2338	58	-0.97	101.33	0
101	Acid Soluble Ca (19%)	0561	18.32	0.0300	18.89	0.6558	0.2338	58	-0.88	101.99	0
101	Acid Soluble Ca (19%)	0255	18.37	0.0500	18.89	0.6558	0.2338	58	-0.80	101.30	0
101	Acid Soluble Ca (19%)	0498	18.40	0.0000	18.89	0.6558	0.2338	58	-0.75	101.03	0
101	Acid Soluble Ca (19%)	0040	18.46	0.0600	18.89	0.6558	0.2338	58	-0.66	101.33	0
101	Acid Soluble Ca (19%)	0043	18.46	0.0800	18.89	0.6558	0.2338	58	-0.66	101.33	0
101	Acid Soluble Ca (19%)	0055	18.48	0.1700	18.89	0.6558	0.2338	58	-0.63	101.33	0
101	Acid Soluble Ca (19%)	0324	18.50	0.2000	18.89	0.6558	0.2338	58	-0.59	101.30	0
101	Acid Soluble Ca (19%)	0513	18.50	0.0400	18.89	0.6558	0.2338	58	-0.59	101.99	0
101	Acid Soluble Ca (19%)	0612	18.55	0.8000	18.89	0.6558	0.2338	58	-0.52	101.33	0
101	Acid Soluble Ca (19%)	0553	18.64	0.5200	18.89	0.6558	0.2338	58	-0.38	101.00	0
101	Acid Soluble Ca (19%)	0307	18.65	0.5000	18.89	0.6558	0.2338	58	-0.37	101.99	0
101	Acid Soluble Ca (19%)	0559	18.66	0.0100	18.89	0.6558	0.2338	58	-0.36	101.99	0
101	Acid Soluble Ca (19%)	0517	18.68	0.3300	18.89	0.6558	0.2338	58	-0.33	101.70	0
101	Acid Soluble Ca (19%)	0377	18.71	0.7400	18.89	0.6558	0.2338	58	-0.27	101.30	0
101	Acid Soluble Ca (19%)	0234	18.73	0.0600	18.89	0.6558	0.2338	58	-0.24	101.30	0
101	Acid Soluble Ca (19%)	0451	18.74	0.0300	18.89	0.6558	0.2338	58	-0.24	101.30	0
101	Acid Soluble Ca (19%)	0368	18.75	0.0598	18.89	0.6558	0.2338	58	-0.22	101.99	0

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			Value	Range	Rob Mean	Rob SD	Rob R-bar				
101	Acid Soluble Ca (19%)	0136	18.75	0.1000	18.89	0.6558	0.2338	58	-0.21	101.33	0
101	Acid Soluble Ca (19%)	0548	18.77	0.1600	18.89	0.6558	0.2338	58	-0.18	101.70	0
101	Acid Soluble Ca (19%)	0029	18.79	0.2200	18.89	0.6558	0.2338	58	-0.15	101.00	0
101	Acid Soluble Ca (19%)	0527	18.86	0.1648	18.89	0.6558	0.2338	58	-0.04	101.33	0
101	Acid Soluble Ca (19%)	0169	18.87	0.1400	18.89	0.6558	0.2338	58	-0.03	101.33	0
101	Acid Soluble Ca (19%)	0605	18.88	0.2000	18.89	0.6558	0.2338	58	-0.02	101.99	0
101	Acid Soluble Ca (19%)	0023	18.90	0.0020	18.89	0.6558	0.2338	58	0.01	101.99	0
101	Acid Soluble Ca (19%)	0405	18.95	0.1000	18.89	0.6558	0.2338	58	0.09	101.32	0
101	Acid Soluble Ca (19%)	0538	19.01	0.0300	18.89	0.6558	0.2338	58	0.18	101.99	0
101	Acid Soluble Ca (19%)	0360	19.01	0.4800	18.89	0.6558	0.2338	58	0.18	101.30	0
101	Acid Soluble Ca (19%)	0394	19.07	0.1360	18.89	0.6558	0.2338	58	0.27	101.33	0
101	Acid Soluble Ca (19%)	0422	19.11	0.0600	18.89	0.6558	0.2338	58	0.34	101.30	0
101	Acid Soluble Ca (19%)	0584	19.20	0.3000	18.89	0.6558	0.2338	58	0.47	101.99	0
101	Acid Soluble Ca (19%)	0472	19.23	0.0900	18.89	0.6558	0.2338	58	0.51	101.33	0
101	Acid Soluble Ca (19%)	0624	19.25	0.4970	18.89	0.6558	0.2338	58	0.55	101.33	0
101	Acid Soluble Ca (19%)	0615	19.27	0.8100	18.89	0.6558	0.2338	58	0.57	101.00	0
101	Acid Soluble Ca (19%)	0543	19.29	0.0190	18.89	0.6558	0.2338	58	0.61	101.33	0
101	Acid Soluble Ca (19%)	0521	19.36	0.0000	18.89	0.6558	0.2338	58	0.72	101.33	0
101	Acid Soluble Ca (19%)	0402	19.37	0.7200	18.89	0.6558	0.2338	58	0.73	101.30	0
101	Acid Soluble Ca (19%)	0476	19.40	0.0532	18.89	0.6558	0.2338	58	0.78	101.70	0
101	Acid Soluble Ca (19%)	0423	19.50	0.0500	18.89	0.6558	0.2338	58	0.92	101.32	0
101	Acid Soluble Ca (19%)	0524	19.55	0.1200	18.89	0.6558	0.2338	58	1.01	101.30	0
101	Acid Soluble Ca (19%)	0291	19.56	0.0100	18.89	0.6558	0.2338	58	1.01	101.30	0
101	Acid Soluble Ca (19%)	0354	19.60	0.0000	18.89	0.6558	0.2338	58	1.08	101.30	0
101	Acid Soluble Ca (19%)	0563	19.60	0.2000	18.89	0.6558	0.2338	58	1.08	101.33	0
101	Acid Soluble Ca (19%)	0433	19.68	1.000	18.89	0.6558	0.2338	58	1.20	101.30	0
101	Acid Soluble Ca (19%)	0523	19.73	0.1000	18.89	0.6558	0.2338	58	1.28	101.99	0
101	Acid Soluble Ca (19%)	0027	20.30‡	0.3700	18.89	0.6558	0.2338	58	2.14	101.33	0
101	Acid Soluble Ca (19%)	0452	20.31‡	0.0300	18.89	0.6558	0.2338	58	2.16	101.33	0
101	Acid Soluble Ca (19%)	0572	20.34‡	0.0800	18.89	0.6558	0.2338	58	2.21	101.99	0
101	Acid Soluble Ca (19%)	0035	20.35‡	0.5000	18.89	0.6558	0.2338	58	2.23	101.30	0
101	Acid Soluble Ca (19%)	0515	20.51‡	1.620	18.89	0.6558	0.2338	58	2.47	101.99	0
101	Acid Soluble Ca (19%)	0049	20.43‡	3.784	18.89	0.6558	0.2338	58	2.35	101.30	1
121	Acid Soluble Mg (%)	0422	0.0071	0.0003	0.0154	0.0082	0.0012	6	-0.91	121.30	0
121	Acid Soluble Mg (%)	0472	0.0100	0.0000	0.0154	0.0082	0.0012	6	-0.59	121.33	0
121	Acid Soluble Mg (%)	0568	0.0143	0.0000	0.0154	0.0082	0.0012	6	-0.12	121.30	0
121	Acid Soluble Mg (%)	0524	0.0150	0.0024	0.0154	0.0082	0.0012	6	-0.05	121.99	0
121	Acid Soluble Mg (%)	0423	0.0185	0.0010	0.0154	0.0082	0.0012	6	0.33	121.32	0
121	Acid Soluble Mg (%)	0371	0.0500	0.0000	0.0154	0.0082	0.0012	6	3.74	121.30	0
121	Acid Soluble Mg (%)	0354	0.0450	0.0300	0.0154	0.0082	0.0012	6	3.20	121.30	1
121	Acid Soluble Mg (%)	0527	< 0.01		0.0154	0.0082	0.0012	6		121.33	5
148	Total S (%)	0354	0.0100	0.0000	0.0739	0.0604	0.0104	3	-1.06	148.99	0
148	Total S (%)	0422	0.0816	0.0007	0.0739	0.0604	0.0104	3	0.13	148.99	0

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148	Total S (%)	0472	0.1300	0.0200	0.0739	0.0604	0.0104	3	0.93	148.07	0
148	Total S (%)	0527	< 0.1		0.0739	0.0604	0.0104	3		148.07	5
149	S - HNO3 soluble (%)	0524	0.0021	0.0000				1		149.04	0
151	Acid Soluble As (ppm)	0524	0.0058	0.0016	9.782	11.13	2.645	5	-0.88	151.30	0
151	Acid Soluble As (ppm)	0523	0.2020	0.0220	9.782	11.13	2.645	5	-0.86	151.30	0
151	Acid Soluble As (ppm)	0368	5.300	5.400	9.782	11.13	2.645	5	-0.40	151.34	0
151	Acid Soluble As (ppm)	0515	20.25	4.500	9.782	11.13	2.645	5	0.94	151.33	0
151	Acid Soluble As (ppm)	0515	23.15	3.300	9.782	11.13	2.645	5	1.20	151.34	0
151	Acid Soluble As (ppm)	0255	0.0000	0.0000	9.782	11.13	2.645	5		151.30	4
151	Acid Soluble As (ppm)	0527	< 0.0001		9.782	11.13	2.645	5		151.33	5
151	Acid Soluble As (ppm)	0548	< 0.05		9.782	11.13	2.645	5		151.33	5
151	Acid Soluble As (ppm)	0572	< 0.09		9.782	11.13	2.645	5		151.99	5
151	Acid Soluble As (ppm)	0498	< 0.2		9.782	11.13	2.645	5		151.00	5
151	Acid Soluble As (ppm)	0220	< 0.5		9.782	11.13	2.645	5		151.32	5
151	Acid Soluble As (ppm)	0220	< 0.5		9.782	11.13	2.645	5		151.99	5
151	Acid Soluble As (ppm)	0481	< 0.5		9.782	11.13	2.645	5		151.99	5
151	Acid Soluble As (ppm)	0136	< 1		9.782	11.13	2.645	5		151.33	5
151	Acid Soluble As (ppm)	0405	< 3		9.782	11.13	2.645	5		151.32	5
151	Acid Soluble As (ppm)	0605	< 6.25		9.782	11.13	2.645	5		151.30	5
151	Acid Soluble As (ppm)	0027	< 10		9.782	11.13	2.645	5		151.33	5
165	Acid Soluble B (%)	0524	0.0063	0.0002	0.0098	0.0030	0.0002	7	-1.06	165.99	0
165	Acid Soluble B (%)	0422	0.0070	0.0002	0.0098	0.0030	0.0002	7	-0.85	165.30	0
165	Acid Soluble B (%)	0354	0.0100	0.0000	0.0098	0.0030	0.0002	7	0.06	165.30	0
165	Acid Soluble B (%)	0371	0.0100	0.0000	0.0098	0.0030	0.0002	7	0.06	165.30	0
165	Acid Soluble B (%)	0472	0.0100	0.0000	0.0098	0.0030	0.0002	7	0.06	165.99	0
165	Acid Soluble B (%)	0563	0.0110	0.0000	0.0098	0.0030	0.0002	7	0.36	165.99	0
165	Acid Soluble B (%)	0653	0.0598	0.0001	0.0098	0.0030	0.0002	7	15.09	165.00	0
165	Acid Soluble B (%)	0527	< 0.01		0.0098	0.0030	0.0002	7		165.99	5
181	Acid Soluble Cd (ppm)	0548	0.0650	0.0100	0.1835	0.1970	0.0170	6	-0.60	181.33	0
181	Acid Soluble Cd (ppm)	0523	0.0675	0.0030	0.1835	0.1970	0.0170	6	-0.59	181.30	0
181	Acid Soluble Cd (ppm)	0572	0.0750	0.0100	0.1835	0.1970	0.0170	6	-0.55	181.99	0
181	Acid Soluble Cd (ppm)	0524	0.0782	0.0292	0.1835	0.1970	0.0170	6	-0.53	181.30	0
181	Acid Soluble Cd (ppm)	0220	0.4000	0.0200	0.1835	0.1970	0.0170	6	1.10	181.32	0
181	Acid Soluble Cd (ppm)	0220	0.4150	0.0300	0.1835	0.1970	0.0170	6	1.18	181.99	0
181	Acid Soluble Cd (ppm)	0255	0.2870	0.1140	0.1835	0.1970	0.0170	6	0.53	181.30	1
181	Acid Soluble Cd (ppm)	0527	< 0.0001		0.1835	0.1970	0.0170	6		181.33	5
181	Acid Soluble Cd (ppm)	0394	< 0.1		0.1835	0.1970	0.0170	6		181.30	5
181	Acid Soluble Cd (ppm)	0368	< 0.1		0.1835	0.1970	0.0170	6		181.34	5
181	Acid Soluble Cd (ppm)	0515	< 0.133		0.1835	0.1970	0.0170	6		181.34	5
181	Acid Soluble Cd (ppm)	0515	< 0.19		0.1835	0.1970	0.0170	6		181.33	5
181	Acid Soluble Cd (ppm)	0605	< 0.25		0.1835	0.1970	0.0170	6		181.30	5
181	Acid Soluble Cd (ppm)	0498	< 0.5		0.1835	0.1970	0.0170	6		181.00	5
181	Acid Soluble Cd (ppm)	0481	< 0.5		0.1835	0.1970	0.0170	6		181.99	5

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181	Acid Soluble Cd (ppm)	0405	< 1		0.1835	0.1970	0.0170	6		181.32	5
181	Acid Soluble Cd (ppm)	0136	< 1		0.1835	0.1970	0.0170	6		181.33	5
181	Acid Soluble Cd (ppm)	0027	< 10		0.1835	0.1970	0.0170	6		181.33	5
191	Acid Soluble Cr (ppm)	0524	0.1694	0.0059	1.129	1.603	0.3103	6	-0.60	191.30	0
191	Acid Soluble Cr (ppm)	0220	0.2200	0.0200	1.129	1.603	0.3103	6	-0.57	191.32	0
191	Acid Soluble Cr (ppm)	0523	0.2970	0.0140	1.129	1.603	0.3103	6	-0.52	191.30	0
191	Acid Soluble Cr (ppm)	0220	0.3250	0.0100	1.129	1.603	0.3103	6	-0.50	191.99	0
191	Acid Soluble Cr (ppm)	0605	2.260	0.6800	1.129	1.603	0.3103	6	0.71	191.30	0
191	Acid Soluble Cr (ppm)	0515	3.500	1.300	1.129	1.603	0.3103	6	1.48	191.34	0
191	Acid Soluble Cr (ppm)	0515	2.025	2.270	1.129	1.603	0.3103	6	0.56	191.33	1
191	Acid Soluble Cr (ppm)	0527	< 0.0001		1.129	1.603	0.3103	6		191.33	5
191	Acid Soluble Cr (ppm)	0548	< 0.05		1.129	1.603	0.3103	6		191.33	5
191	Acid Soluble Cr (ppm)	0368	< 0.1		1.129	1.603	0.3103	6		191.34	5
191	Acid Soluble Cr (ppm)	0572	< 0.25		1.129	1.603	0.3103	6		191.99	5
191	Acid Soluble Cr (ppm)	0405	< 1		1.129	1.603	0.3103	6		191.32	5
191	Acid Soluble Cr (ppm)	0394	< 2		1.129	1.603	0.3103	6		191.30	5
191	Acid Soluble Cr (ppm)	0136	< 2.5		1.129	1.603	0.3103	6		191.33	5
191	Acid Soluble Cr (ppm)	0027	< 10		1.129	1.603	0.3103	6		191.33	5
202	Acid Soluble Co (ppm)	0523	0.0640	0.0100	0.8044	0.9242	0.2868	6	-0.80	202.30	0
202	Acid Soluble Co (ppm)	0548	0.0650	0.0100	0.8044	0.9242	0.2868	6	-0.80	202.33	0
202	Acid Soluble Co (ppm)	0515	0.4270	0.4940	0.8044	0.9242	0.2868	6	-0.41	202.34	0
202	Acid Soluble Co (ppm)	0524	0.8795	0.0267	0.8044	0.9242	0.2868	6	0.08	202.30	0
202	Acid Soluble Co (ppm)	0368	1.200	0.6000	0.8044	0.9242	0.2868	6	0.43	202.34	0
202	Acid Soluble Co (ppm)	0515	5.040	0.5800	0.8044	0.9242	0.2868	6	4.58	202.33	0
202	Acid Soluble Co (ppm)	0255	4.194	1.877	0.8044	0.9242	0.2868	6	3.67	202.99	1
202	Acid Soluble Co (ppm)	0527	< 0.0001		0.8044	0.9242	0.2868	6		202.33	5
202	Acid Soluble Co (ppm)	0220	< 0.1		0.8044	0.9242	0.2868	6		202.32	5
202	Acid Soluble Co (ppm)	0220	< 0.1		0.8044	0.9242	0.2868	6		202.99	5
202	Acid Soluble Co (ppm)	0405	< 1		0.8044	0.9242	0.2868	6		202.32	5
202	Acid Soluble Co (ppm)	0605	< 1.25		0.8044	0.9242	0.2868	6		202.30	5
202	Acid Soluble Co (ppm)	0136	< 2.5		0.8044	0.9242	0.2868	6		202.33	5
202	Acid Soluble Co (ppm)	0027	< 10		0.8044	0.9242	0.2868	6		202.33	5
221	Acid Soluble Cu (%)	0422	0.0001	0.0000	0.0004	0.0005	0.0001	7	-0.60	221.30	0
221	Acid Soluble Cu (%)	0548	0.0001	0.0000	0.0004	0.0005	0.0001	7	-0.60	221.33	0
221	Acid Soluble Cu (%)	0515	0.0001	0.0000	0.0004	0.0005	0.0001	7	-0.60	221.99	0
221	Acid Soluble Cu (%)	0368	0.0002	0.0001	0.0004	0.0005	0.0001	7	-0.49	221.99	0
221	Acid Soluble Cu (%)	0524	0.0003	0.0001	0.0004	0.0005	0.0001	7	-0.28	221.99	0
221	Acid Soluble Cu (%)	0255	0.0010	0.0000	0.0004	0.0005	0.0001	7	1.28	221.30	0
221	Acid Soluble Cu (%)	0027	0.0010	0.0000	0.0004	0.0005	0.0001	7	1.28	221.33	0
221	Acid Soluble Cu (%)	0624	0.0018	0.0004	0.0004	0.0005	0.0001	7	2.95	221.33	1
221	Acid Soluble Cu (%)	0402	0.0019	0.0004	0.0004	0.0005	0.0001	7	3.16	221.30	1
221	Acid Soluble Cu (%)	0371	0.0000	0.0000	0.0004	0.0005	0.0001	7		221.30	4
221	Acid Soluble Cu (%)	0106	0.0000	0.0000	0.0004	0.0005	0.0001	7		221.33	4

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				
221	Acid Soluble Cu (%)	0527	< 0.0001		0.0004	0.0005	0.0001	7		221.33	5
221	Acid Soluble Cu (%)	0405	< 0.0002		0.0004	0.0005	0.0001	7		221.32	5
221	Acid Soluble Cu (%)	0136	< 0.0002		0.0004	0.0005	0.0001	7		221.33	5
221	Acid Soluble Cu (%)	0394	< 0.0002		0.0004	0.0005	0.0001	7		221.33	5
221	Acid Soluble Cu (%)	0354	< 0.01		0.0004	0.0005	0.0001	7		221.30	5
221	Acid Soluble Cu (%)	0481	< 0.01		0.0004	0.0005	0.0001	7		221.99	5
221	Acid Soluble Cu (%)	0515	< 0.26		0.0004	0.0005	0.0001	7		221.33	5
241	Acid Soluble Fe (%)	0422	0.0004	0.0001	0.0010	0.0008	0.0002	3	-0.61	241.30	0
241	Acid Soluble Fe (%)	0524	0.0007	0.0001	0.0010	0.0008	0.0002	3	-0.31	241.99	0
241	Acid Soluble Fe (%)	0035	0.0019	0.0005	0.0010	0.0008	0.0002	3	0.92	241.30	0
241	Acid Soluble Fe (%)	0371	0.0000	0.0000	0.0010	0.0008	0.0002	3		241.30	4
241	Acid Soluble Fe (%)	0527	< 0.001		0.0010	0.0008	0.0002	3		241.33	5
241	Acid Soluble Fe (%)	0354	< 0.01		0.0010	0.0008	0.0002	3		241.30	5
251	Acid Soluble Pb (ppm)	0572	0.0650	0.0100	3.668	7.595	0.5473	5	-0.47	251.99	0
251	Acid Soluble Pb (ppm)	0523	0.0930	0.0080	3.668	7.595	0.5473	5	-0.47	251.30	0
251	Acid Soluble Pb (ppm)	0524	0.3566	0.0087	3.668	7.595	0.5473	5	-0.44	251.30	0
251	Acid Soluble Pb (ppm)	0220	0.5750	0.0100	3.668	7.595	0.5473	5	-0.41	251.99	0
251	Acid Soluble Pb (ppm)	0515	17.25	2.700	3.668	7.595	0.5473	5	1.79	251.34	0
251	Acid Soluble Pb (ppm)	0255	0.0000	0.0000	3.668	7.595	0.5473	5		251.30	4
251	Acid Soluble Pb (ppm)	0527	< 0.0001		3.668	7.595	0.5473	5		251.33	5
251	Acid Soluble Pb (ppm)	0548	< 0.05		3.668	7.595	0.5473	5		251.33	5
251	Acid Soluble Pb (ppm)	0498	< 0.1		3.668	7.595	0.5473	5		251.00	5
251	Acid Soluble Pb (ppm)	0220	< 0.5		3.668	7.595	0.5473	5		251.32	5
251	Acid Soluble Pb (ppm)	0481	< 0.5		3.668	7.595	0.5473	5		251.99	5
251	Acid Soluble Pb (ppm)	0368	< 0.9		3.668	7.595	0.5473	5		251.34	5
251	Acid Soluble Pb (ppm)	0394	< 1		3.668	7.595	0.5473	5		251.30	5
251	Acid Soluble Pb (ppm)	0136	< 3		3.668	7.595	0.5473	5		251.33	5
251	Acid Soluble Pb (ppm)	0405	< 4		3.668	7.595	0.5473	5		251.32	5
251	Acid Soluble Pb (ppm)	0605	< 6.25		3.668	7.595	0.5473	5		251.30	5
251	Acid Soluble Pb (ppm)	0027	< 10		3.668	7.595	0.5473	5		251.33	5
261	Acid Soluble Mn (%)	0422	0.0002	0.0000	0.0003	0.0001	0.0001	4	-1.18	261.30	0
261	Acid Soluble Mn (%)	0527	0.0003	0.0000	0.0003	0.0001	0.0001	4	0.17	261.35	0
261	Acid Soluble Mn (%)	0524	0.0003	0.0000	0.0003	0.0001	0.0001	4	0.17	261.99	0
261	Acid Soluble Mn (%)	0563	0.0004	0.0001	0.0003	0.0001	0.0001	4	0.84	261.35	0
261	Acid Soluble Mn (%)	0371	0.0000	0.0000	0.0003	0.0001	0.0001	4		261.32	4
261	Acid Soluble Mn (%)	0354	< 0.01		0.0003	0.0001	0.0001	4		261.30	5
281	Acid Soluble Hg (ppm)	0527	< 0.001					0		281.30	5
281	Acid Soluble Hg (ppm)	0572	< 0.009					0		281.99	5
281	Acid Soluble Hg (ppm)	0220	< 0.01					0		281.99	5
281	Acid Soluble Hg (ppm)	0515	< 0.1					0		281.30	5
281	Acid Soluble Hg (ppm)	0481	< 0.5					0		281.00	5
281	Acid Soluble Hg (ppm)	0498	< 0.5					0		281.00	5
281	Acid Soluble Hg (ppm)	0605	< 1.25					0		281.30	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				
281	Acid Soluble Hg (ppm)	0405	< 2					0		281.30	5
289	Acid Soluble Mo (ppm)	0524	0.2064	0.0053				2		289.30	0
289	Acid Soluble Mo (ppm)	0515	168.5	17.00				2		289.34	0
289	Acid Soluble Mo (ppm)	0255	0.0000	0.0000				2		289.30	4
289	Acid Soluble Mo (ppm)	0106	0.0000	0.0000				2		289.33	4
289	Acid Soluble Mo (ppm)	0527	< 0.0001					2		289.33	5
289	Acid Soluble Mo (ppm)	0548	< 0.05					2		289.33	5
289	Acid Soluble Mo (ppm)	0368	< 0.1					2		289.34	5
289	Acid Soluble Mo (ppm)	0220	< 0.3					2		289.32	5
289	Acid Soluble Mo (ppm)	0220	< 0.3					2		289.99	5
289	Acid Soluble Mo (ppm)	0402	< 1					2		289.30	5
289	Acid Soluble Mo (ppm)	0405	< 1					2		289.32	5
289	Acid Soluble Mo (ppm)	0572	< 2.48					2		289.99	5
289	Acid Soluble Mo (ppm)	0136	< 2.5					2		289.33	5
291	Acid Soluble Ni (ppm)	0524	0.2906	0.1353	1.524	2.190	0.0743	6	-0.56	291.30	0
291	Acid Soluble Ni (ppm)	0523	0.3130	0.0420	1.524	2.190	0.0743	6	-0.55	291.30	0
291	Acid Soluble Ni (ppm)	0220	0.3150	0.0300	1.524	2.190	0.0743	6	-0.55	291.32	0
291	Acid Soluble Ni (ppm)	0220	0.4150	0.0900	1.524	2.190	0.0743	6	-0.51	291.99	0
291	Acid Soluble Ni (ppm)	0405	3.000	0.0000	1.524	2.190	0.0743	6	0.67	291.32	0
291	Acid Soluble Ni (ppm)	0515	16.40	0.0000	1.524	2.190	0.0743	6	6.79	291.34	0
291	Acid Soluble Ni (ppm)	0255	8.353	1.528	1.524	2.190	0.0743	6	3.12	291.99	1
291	Acid Soluble Ni (ppm)	0527	< 0.0001		1.524	2.190	0.0743	6		291.33	5
291	Acid Soluble Ni (ppm)	0548	< 0.05		1.524	2.190	0.0743	6		291.33	5
291	Acid Soluble Ni (ppm)	0368	< 0.3		1.524	2.190	0.0743	6		291.34	5
291	Acid Soluble Ni (ppm)	0605	< 1.25		1.524	2.190	0.0743	6		291.30	5
291	Acid Soluble Ni (ppm)	0572	< 1.66		1.524	2.190	0.0743	6		291.99	5
291	Acid Soluble Ni (ppm)	0394	< 2		1.524	2.190	0.0743	6		291.30	5
291	Acid Soluble Ni (ppm)	0136	< 2.5		1.524	2.190	0.0743	6		291.33	5
291	Acid Soluble Ni (ppm)	0027	< 10		1.524	2.190	0.0743	6		291.33	5
301	Acid Soluble Se (ppm)	0524	0.0135	0.0177	7.491	11.21	1.838	4	-0.67	301.30	0
301	Acid Soluble Se (ppm)	0523	0.1000	0.0340	7.491	11.21	1.838	4	-0.66	301.30	0
301	Acid Soluble Se (ppm)	0368	6.100	4.200	7.491	11.21	1.838	4	-0.12	301.34	0
301	Acid Soluble Se (ppm)	0515	23.75	3.100	7.491	11.21	1.838	4	1.45	301.34	0
301	Acid Soluble Se (ppm)	0255	0.0000	0.0000	7.491	11.21	1.838	4		301.99	4
301	Acid Soluble Se (ppm)	0527	< 0.001		7.491	11.21	1.838	4		301.33	5
301	Acid Soluble Se (ppm)	0548	< 0.05		7.491	11.21	1.838	4		301.33	5
301	Acid Soluble Se (ppm)	0220	< 0.3		7.491	11.21	1.838	4		301.32	5
301	Acid Soluble Se (ppm)	0220	< 0.3		7.491	11.21	1.838	4		301.99	5
301	Acid Soluble Se (ppm)	0481	< 0.5		7.491	11.21	1.838	4		301.99	5
301	Acid Soluble Se (ppm)	0572	< 2.48		7.491	11.21	1.838	4		301.99	5
301	Acid Soluble Se (ppm)	0605	< 6.25		7.491	11.21	1.838	4		301.30	5
301	Acid Soluble Se (ppm)	0405	< 10		7.491	11.21	1.838	4		301.32	5
301	Acid Soluble Se (ppm)	0027	< 10		7.491	11.21	1.838	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 (%)	0572	0.0179	0.0035	0.0296	0.0143	0.0014	4	-0.83	311.99	0
311	Sodium (%)	0422	0.0223	0.0001	0.0296	0.0143	0.0014	4	-0.52	311.32	0
311	Sodium (%)	0527	0.0284	0.0007	0.0296	0.0143	0.0014	4	-0.09	311.33	0
311	Sodium (%)	0354	0.0500	0.0000	0.0296	0.0143	0.0014	4	1.43	311.99	0
321	Acid Soluble Zn (%)	0548	0.0001	0.0000	0.0021	0.0021	0.0003	10	-0.93	321.33	0
321	Acid Soluble Zn (%)	0524	0.0001	0.0000	0.0021	0.0021	0.0003	10	-0.93	321.99	0
321	Acid Soluble Zn (%)	0422	0.0004	0.0002	0.0021	0.0021	0.0003	10	-0.79	321.30	0
321	Acid Soluble Zn (%)	0255	0.0010	0.0000	0.0021	0.0021	0.0003	10	-0.51	321.30	0
321	Acid Soluble Zn (%)	0027	0.0010	0.0000	0.0021	0.0021	0.0003	10	-0.51	321.33	0
321	Acid Soluble Zn (%)	0563	0.0020	0.0000	0.0021	0.0021	0.0003	10	-0.04	321.33	0
321	Acid Soluble Zn (%)	0653	0.0032	0.0001	0.0021	0.0021	0.0003	10	0.49	321.00	0
321	Acid Soluble Zn (%)	0652	0.0033	0.0002	0.0021	0.0021	0.0003	10	0.56	321.00	0
321	Acid Soluble Zn (%)	0402	0.0046	0.0001	0.0021	0.0021	0.0003	10	1.15	321.30	0
321	Acid Soluble Zn (%)	0624	0.0191	0.0009	0.0021	0.0021	0.0003	10	7.92	321.33	0
321	Acid Soluble Zn (%)	0106	0.0021	0.0012	0.0021	0.0021	0.0003	10	0.00	321.33	1
321	Acid Soluble Zn (%)	0371	0.0000	0.0000	0.0021	0.0021	0.0003	10		321.30	4
321	Acid Soluble Zn (%)	0368	0.0000	0.0000	0.0021	0.0021	0.0003	10		321.99	4
321	Acid Soluble Zn (%)	0527	< 0.0001		0.0021	0.0021	0.0003	10		321.33	5
321	Acid Soluble Zn (%)	0394	< 0.0002		0.0021	0.0021	0.0003	10		321.33	5
321	Acid Soluble Zn (%)	0405	< 0.0003		0.0021	0.0021	0.0003	10		321.32	5
321	Acid Soluble Zn (%)	0136	< 0.0003		0.0021	0.0021	0.0003	10		321.33	5
321	Acid Soluble Zn (%)	0354	< 0.01		0.0021	0.0021	0.0003	10		321.30	5
321	Acid Soluble Zn (%)	0481	< 0.01		0.0021	0.0021	0.0003	10		321.99	5
321	Acid Soluble Zn (%)	0515	< 0.142		0.0021	0.0021	0.0003	10		321.99	5
321	Acid Soluble Zn (%)	0515	< 0.19		0.0021	0.0021	0.0003	10		321.33	5
325	Water Soluble Zn (%)	0368	0.0000	0.0000				0		325.30	4

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.