



Method PT For All Labs

Sample # 250213

Granular Urea 46-0-0

Magruder Fertilizer Proficiency Testing Program

Regular PT Scheme Sample Doubles with N Scheme

Statistical Summary

Methods: 65

Labs Reporting: 56

Issue Date : 03/31/2025

Method Code	Analyte & Method Sample # 250213	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Method Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	Method IA Ratio	Average Range (R-bar)	Horwitz %RSD
001.99	Ammoniacal N, Other (%)	2	2	0.5519	0.0275								
005.00	Urea N, Urease (as N) (%)	1		41.25									
005.10	Urea N, HPLC(asN),H2Omobilephase (%)	1		45.61									
005.99	Urea N, Other (%)	5	5	45.61	0.9983	45.61		0.9983	0.5581	2.19%		0.0938	1.48%
006.99	Biuret N, Other (%)	3	3	0.9350	0.5852	0.9350		0.5852	0.4223	62.59%		0.1300	4.04%
008.00	Biuret, AA (as Biuret) (%)	1		1.250									
008.10	Biuret, Spectrophotometric (as Biuret) (%)	4	4	1.114	0.1716	1.114		0.1716	0.1072	15.40%		0.0418	3.94%
008.99	Biuret, Other (%)	1		1.093									
010.11	Total N, Modified Comprehensive (46%)	1		46.03									
010.12	Total N, Salicylic (46%)	2	2	45.80	0.3536								
010.16	Total N, Raney (46%)	1		46.60									
010.60	Total N, Combustion (46%)	41	41	46.34	0.4414	46.35	0.8800	0.3452	0.0674	0.74%	0.91	0.1440	1.47%
010.99	Total N, Other (46%)	10	9	46.18	0.1835	46.19	0.8800	0.1779	0.0741	0.39%	0.47	0.1782	1.47%
020.50	Total P2O5, ICP (%)	1		0.0021									
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext.	1		0.0305									
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	1		0.0065									
050.99	Soluble K2O, Other (%)	1		0.0055									
060.00	Water (Free), Vacuum Oven (%)	1		0.1400									
060.20	Water (Free), Karl Fischer (%)	3	3	0.2942	0.1059	0.2942		0.1059	0.0764	36.00%		0.0557	4.81%
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours, 5g samp	2	2	0.0970	0.0608								
060.99	Water (Free), Other (%)	2	2	0.0728	0.0286								
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	1		0.0550									
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	1		0.0050									
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	1		0.0150									
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (%)	1		0.0050									
121.99	Acid Soluble Mg, Other (%)	1		0.0003									
148.99	Total S, Other (%)	1		0.0000									
149.04	S - HNO3 soluble, ICP (%)	1		0.0015									
151.30	Acid Soluble As, ICP (ppm)	2	1	3.175	4.349								

Method Code	Analyte & Method Sample # 250213	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Method Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	Method IA Ratio	Average Range (R-bar)	Horwitz %RSD
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	1		0.5000									
151.99	Acid Soluble As, Other (ppm)	1		0.5000									
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	1		0.0100									
165.99	Acid Soluble B, Other (%)	2	2	0.1288	0.1820								
181.30	Acid Soluble Cd, ICP (ppm)	4	2	0.1377	0.1105	0.0504		0.0701	0.0620	139.04%		0.0015	22.00%
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	1		0.1000									
181.99	Acid Soluble Cd, Other (ppm)	1		0.1000									
191.30	Acid Soluble Cr, ICP (ppm)	3	2	0.5895	0.5735	0.2592		0.0577	0.0510	22.26%		0.0054	19.60%
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	1		0.3500									
191.99	Acid Soluble Cr, Other (ppm)	1		0.4000									
202.30	Acid Soluble Co, ICP (ppm)	3	2	0.5137	0.6393	0.1456	1.0437	0.0644	0.0569	44.26%	0.14	0.0284	21.38%
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	1		0.1000									
202.99	Acid Soluble Co, Other (ppm)	1		0.1000									
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	1		0.0100									
221.99	Acid Soluble Cu, Other (%)	2	1	0.0001	0.0001								
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	1		0.0100									
241.99	Acid Soluble Fe, Other (%)	1		0.0003									
251.30	Acid Soluble Pb, ICP (ppm)	4	2	1.879	2.942	0.1335		0.0474	0.0419	35.51%		0.0313	21.66%
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	1		0.7000									
251.99	Acid Soluble Pb, Other (ppm)	1		0.7000									
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	1		0.0100									
261.99	Acid Soluble Mn, Other (%)	2	1	0.0001	0.0001								
281.30	Acid Soluble Hg, ICP (ppm)	2	0	0.6500	0.8485								
281.99	Acid Soluble Hg, Other (ppm)	2	1	0.0053	0.0067								
289.30	Acid Soluble Mo, ICP (ppm)	2	2	0.0640	0.0198								
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	1		0.3000									
289.99	Acid Soluble Mo, Other (ppm)	1		0.4500									
291.30	Acid Soluble Ni, ICP (ppm)	3	2	0.4912	0.6578	0.1117		0.0400	0.0353	35.79%		0.0543	22.00%
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	1		0.2000									
291.99	Acid Soluble Ni, Other (ppm)	1		0.3000									
301.30	Acid Soluble Se, ICP (ppm)	3	2	2.119	3.578	0.0533		0.0661	0.0584	124.03%		0.0067	22.00%
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	1		0.3000									
301.99	Acid Soluble Se, Other (ppm)	1		0.3000									
311.99	Sodium, Other (%)	1		0.0250									
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	1		0.0100									
321.99	Acid Soluble Zn, Other (%)	2	1	0.0001	0.0001								

The Method IA Ratio = 2.33 * Robust SD / IA at the Method 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.

Horwitz %RSD
Average Range (R-bar)
Method IA Ratio
Robust % RSD
Robust Uncertainty (U)
Robust sd
IA at Method Value
Assigned Value Robust Mean
Raw SD
Raw Mean
Tests in Robust Calculations
Tests Submitted
Analyte & Method Sample # 250213
Method Code



Method PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Sample # 250213

Regular PT Scheme Sample Doubles with N Scheme

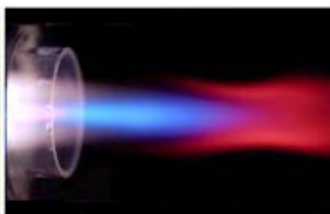
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Method Precision Report

Issue Date : 03/31/2025

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility sR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
010.60	Total N, Combustion (46%)	41	40	46.37	0.4054	0.3963	0.1212	0.4144	0.85%	0.26%	0.89%	3.419
010.99	Total N, Other (46%)	10	8	46.16	0.1292	0.0839	0.1390	0.1623	0.18%	0.30%	0.35%	1.168

Notes: Precision data calculated when 5 or more Tests included.



Method PT For All Labs

Magruder Fertilizer Proficiency Testing Program

Methods: 65

Sample # 250213

Regular PT Scheme Sample Doubles with N Scheme

Labs Reporting: 56

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Lab Values

Issue Date : 03/31/2025

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
001.99	Ammoniacal N, Other (%)	0593	0.5325	0.0050				2			0
001.99	Ammoniacal N, Other (%)	0524	0.5714	0.0017				2			0
005.00	Urea N, Urease (as N) (%)	0389	41.25	0.3000				1			0
005.10	Urea N, HPLC(asN),H2Omobilephase (%)	0394	45.61	0.4030				1			0
005.99	Urea N, Other (%)	0524	44.10	0.0117	45.61	0.9983	0.0938	5	-1.52		0
005.99	Urea N, Other (%)	0029	45.09	0.0500	45.61	0.9983	0.0938	5	-0.53		0
005.99	Urea N, Other (%)	0476	46.19	0.0572	45.61	0.9983	0.0938	5	0.57		0
005.99	Urea N, Other (%)	0593	46.28	0.2800	45.61	0.9983	0.0938	5	0.66		0
005.99	Urea N, Other (%)	0605	46.42	0.0700	45.61	0.9983	0.0938	5	0.80		0
006.99	Biuret N, Other (%)	0292	0.2600	0.0000	0.9350	0.5852	0.1300	3	-1.15		0
006.99	Biuret N, Other (%)	0481	1.245	0.1300	0.9350	0.5852	0.1300	3	0.53		0
006.99	Biuret N, Other (%)	0534	1.300	0.0000	0.9350	0.5852	0.1300	3	0.62		0
008.00	Biuret, AA (as Biuret) (%)	0498	1.250	0.1000				1			0
008.10	Biuret, Spectrophotometric (as Biuret) (%)	0405	0.8600	0.0000	1.114	0.1716	0.0418	4	-1.48		0
008.10	Biuret, Spectrophotometric (as Biuret) (%)	0371	1.160	0.0000	1.114	0.1716	0.0418	4	0.27		0
008.10	Biuret, Spectrophotometric (as Biuret) (%)	0572	1.210	0.0400	1.114	0.1716	0.0418	4	0.56		0
008.10	Biuret, Spectrophotometric (as Biuret) (%)	0476	1.226	0.0436	1.114	0.1716	0.0418	4	0.65		0
008.99	Biuret, Other (%)	0394	1.093	0.0030				1			0
010.11	Total N, Modified Comprehensive (46%)	0309	46.03	0.0600				1			0
010.12	Total N, Salicylic (46%)	0572	45.55	0.5000				2			0
010.12	Total N, Salicylic (46%)	0498	46.05	0.1000				2			0
010.16	Total N, Raney (46%)	0572	46.60	0.0000				1			0
010.60	Total N, Combustion (46%)	0422	45.18	0.0100	46.35	0.3452	0.1440	41	-3.39	Low	0
010.60	Total N, Combustion (46%)	0035	45.40	0.2000	46.35	0.3452	0.1440	41	-2.74	Low	0
010.60	Total N, Combustion (46%)	0043	45.59	0.1000	46.35	0.3452	0.1440	41	-2.19	OK	0
010.60	Total N, Combustion (46%)	0136	45.70	0.4200	46.35	0.3452	0.1440	41	-1.87	OK	0
010.60	Total N, Combustion (46%)	0055	45.74	0.2600	46.35	0.3452	0.1440	41	-1.75	OK	0
010.60	Total N, Combustion (46%)	0389	45.87	0.0800	46.35	0.3452	0.1440	41	-1.38	OK	0
010.60	Total N, Combustion (46%)	0234	45.96	0.1700	46.35	0.3452	0.1440	41	-1.13	OK	0
010.60	Total N, Combustion (46%)	0354	46.10	0.0000	46.35	0.3452	0.1440	41	-0.71	OK	0
010.60	Total N, Combustion (46%)	0023	46.12	0.0310	46.35	0.3452	0.1440	41	-0.64	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
010.60	Total N, Combustion (46%)	0452	46.13	0.0100	46.35	0.3452	0.1440	41	-0.64	OK	0
010.60	Total N, Combustion (46%)	0421	46.18	0.3400	46.35	0.3452	0.1440	41	-0.48	OK	0
010.60	Total N, Combustion (46%)	0521	46.25	0.0000	46.35	0.3452	0.1440	41	-0.28	OK	0
010.60	Total N, Combustion (46%)	0451	46.25	0.3000	46.35	0.3452	0.1440	41	-0.28	OK	0
010.60	Total N, Combustion (46%)	0360	46.27	0.1400	46.35	0.3452	0.1440	41	-0.22	OK	0
010.60	Total N, Combustion (46%)	0307	46.28	0.2500	46.35	0.3452	0.1440	41	-0.20	OK	0
010.60	Total N, Combustion (46%)	0177	46.28	0.1470	46.35	0.3452	0.1440	41	-0.18	OK	0
010.60	Total N, Combustion (46%)	0291	46.29	0.0100	46.35	0.3452	0.1440	41	-0.18	OK	0
010.60	Total N, Combustion (46%)	0481	46.30	0.0200	46.35	0.3452	0.1440	41	-0.13	OK	0
010.60	Total N, Combustion (46%)	0534	46.30	0.0000	46.35	0.3452	0.1440	41	-0.13	OK	0
010.60	Total N, Combustion (46%)	0102	46.32	0.1100	46.35	0.3452	0.1440	41	-0.09	OK	0
010.60	Total N, Combustion (46%)	0405	46.33	0.0200	46.35	0.3452	0.1440	41	-0.05	OK	0
010.60	Total N, Combustion (46%)	0095	46.36	0.1000	46.35	0.3452	0.1440	41	0.04	OK	0
010.60	Total N, Combustion (46%)	0040	46.40	0.0000	46.35	0.3452	0.1440	41	0.16	OK	0
010.60	Total N, Combustion (46%)	0169	46.41	0.0200	46.35	0.3452	0.1440	41	0.19	OK	0
010.60	Total N, Combustion (46%)	0220	46.41	0.0400	46.35	0.3452	0.1440	41	0.19	OK	0
010.60	Total N, Combustion (46%)	0231	46.41	0.1800	46.35	0.3452	0.1440	41	0.19	OK	0
010.60	Total N, Combustion (46%)	0586	46.43	0.2600	46.35	0.3452	0.1440	41	0.24	OK	0
010.60	Total N, Combustion (46%)	0371	46.46	0.1500	46.35	0.3452	0.1440	41	0.32	OK	0
010.60	Total N, Combustion (46%)	0324	46.50	0.2000	46.35	0.3452	0.1440	41	0.45	OK	0
010.60	Total N, Combustion (46%)	0233	46.54	0.1300	46.35	0.3452	0.1440	41	0.55	OK	0
010.60	Total N, Combustion (46%)	0029	46.56	0.2000	46.35	0.3452	0.1440	41	0.62	OK	0
010.60	Total N, Combustion (46%)	0542	46.60	0.0300	46.35	0.3452	0.1440	41	0.72	OK	0
010.60	Total N, Combustion (46%)	0423	46.60	0.1400	46.35	0.3452	0.1440	41	0.74	OK	0
010.60	Total N, Combustion (46%)	0034	46.66	0.1000	46.35	0.3452	0.1440	41	0.91	OK	0
010.60	Total N, Combustion (46%)	0527	46.68	0.1000	46.35	0.3452	0.1440	41	0.97	OK	0
010.60	Total N, Combustion (46%)	0042	46.70	0.0000	46.35	0.3452	0.1440	41	1.03	OK	0
010.60	Total N, Combustion (46%)	0494	46.72	0.2400	46.35	0.3452	0.1440	41	1.08	OK	0
010.60	Total N, Combustion (46%)	0593	46.81	0.2800	46.35	0.3452	0.1440	41	1.33	OK	0
010.60	Total N, Combustion (46%)	0049	46.96	0.2800	46.35	0.3452	0.1440	41	1.78	OK	0
010.60	Total N, Combustion (46%)	0292	47.39	0.1000	46.35	0.3452	0.1440	41	3.03	High	0
010.60	Total N, Combustion (46%)	0255	47.42	0.1610	46.35	0.3452	0.1440	41	3.11	High	0
010.99	Total N, Other (46%)	0577	46.03	0.1400	46.19	0.1779	0.1782	9	-0.85	OK	0
010.99	Total N, Other (46%)	0600	46.05	0.2000	46.19	0.1779	0.1782	9	-0.75	OK	0
010.99	Total N, Other (46%)	0652	46.10	0.0100	46.19	0.1779	0.1782	9	-0.51	OK	0
010.99	Total N, Other (46%)	0559	46.12	0.0100	46.19	0.1779	0.1782	9	-0.41	OK	0
010.99	Total N, Other (46%)	0653	46.12	0.0100	46.19	0.1779	0.1782	9	-0.41	OK	0
010.99	Total N, Other (46%)	0647	46.17	0.4017	46.19	0.1779	0.1782	9	-0.14	OK	0
010.99	Total N, Other (46%)	0481	46.33	0.0600	46.19	0.1779	0.1782	9	0.70	OK	0
010.99	Total N, Other (46%)	0584	46.39	0.2900	46.19	0.1779	0.1782	9	0.99	OK	0
010.99	Total N, Other (46%)	0615	46.55	0.7000	46.19	0.1779	0.1782	9	1.85	OK	0
010.99	Total N, Other (46%)	0524	45.96	1.758	46.19	0.1779	0.1782	9	-1.19	OK	1
020.50	Total P2O5, ICP (%)	0524	0.0021	0.0003				1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
041.21	Direct Available P2O5, Spectrophotometric, Citrate-EDTA Ext. (	0354	0.0305	0.0030				1			0
050.52	Soluble K2O, ICP (Citrate-EDTA) (%)	0354	0.0065	0.0010				1			0
050.99	Soluble K2O, Other (%)	0524	0.0055	0.0017				1			0
060.00	Water (Free), Vacuum Oven (%)	0405	0.1400	0.0000				1			0
060.20	Water (Free), Karl Fischer (%)	0498	0.2175	0.0370	0.2942	0.1059	0.0557	3	-0.72		0
060.20	Water (Free), Karl Fischer (%)	0234	0.2500	0.1000	0.2942	0.1059	0.0557	3	-0.42		0
060.20	Water (Free), Karl Fischer (%)	0371	0.4150	0.0300	0.2942	0.1059	0.0557	3	1.14		0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours, 5g sample	0394	0.0540	0.0040				2			0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours, 5g sample	0593	0.1400	0.0000				2			0
060.99	Water (Free), Other (%)	0586	0.0525	0.0050				2			0
060.99	Water (Free), Other (%)	0136	0.0930	0.0060				2			0
101.30	Acid Soluble Ca, ICP, test portion inorganic 965.09 (%)	0354	0.0550	0.0100				1			0
101.32	Acid Soluble Ca, ICP, test portion 2006.03A-C (%)	0423	< 0.005					0			5
121.30	Acid Soluble Mg, ICP, test portion inorganic 965.09 (%)	0354	0.0150	0.0100				1			0
121.32	Acid Soluble Mg, ICP, test portion 2006.03A-C (%)	0423	< 0.005					0			5
121.99	Acid Soluble Mg, Other (%)	0524	0.0003	0.0001				1			0
148.99	Total S, Other (%)	0354	0.0000	0.0000				0			4
149.04	S - HNO3 soluble, ICP (%)	0524	0.0015	0.0009				1			0
151.30	Acid Soluble As, ICP (ppm)	0593	0.1000	0.0000				1			0
151.30	Acid Soluble As, ICP (ppm)	0605	< 6.25					1			5
151.32	Acid Soluble As, ICP, 2006.03 (ppm)	0220	< 0.5					0			5
151.99	Acid Soluble As, Other (ppm)	0220	< 0.5					0			5
165.30	Acid Soluble B, ICP, test portion in 982.01 (%)	0354	< 0.01					0			5
165.99	Acid Soluble B, Other (%)	0593	0.0002	0.0001				2			0
165.99	Acid Soluble B, Other (%)	0524	0.2575	0.5148				2			0
181.30	Acid Soluble Cd, ICP (ppm)	0524	0.0009	0.0015				2			0
181.30	Acid Soluble Cd, ICP (ppm)	0593	0.1000	0.0000				2			0
181.30	Acid Soluble Cd, ICP (ppm)	0371	< 0.2					2			5
181.30	Acid Soluble Cd, ICP (ppm)	0605	< 0.25					2			5
181.32	Acid Soluble Cd, ICP, 2006.03 (ppm)	0220	0.1000	0.0000				1			0
181.99	Acid Soluble Cd, Other (ppm)	0220	0.1000	0.0000				1			0
191.30	Acid Soluble Cr, ICP (ppm)	0524	0.2184	0.0054				2			0
191.30	Acid Soluble Cr, ICP (ppm)	0593	0.3000	0.0000				2			0
191.30	Acid Soluble Cr, ICP (ppm)	0605	< 1.25					2			5
191.32	Acid Soluble Cr, ICP, 2006.03 (ppm)	0220	0.3500	0.1000				1			0
191.99	Acid Soluble Cr, Other (ppm)	0220	0.4000	0.0000				1			0
202.30	Acid Soluble Co, ICP (ppm)	0593	0.1000	0.0000				2			0
202.30	Acid Soluble Co, ICP (ppm)	0524	0.1911	0.0284				2			0
202.30	Acid Soluble Co, ICP (ppm)	0605	< 1.25					2			5
202.32	Acid Soluble Co, ICP, 2006.03 (ppm)	0220	< 0.1					0			5
202.99	Acid Soluble Co, Other (ppm)	0220	< 0.1					0			5
221.30	Acid Soluble Cu, ICP, test portion inorganic 965.09 (%)	0354	< 0.01					0			5
221.99	Acid Soluble Cu, Other (%)	0524	0.0001	0.0000				1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		*Robust Method Values			# Tests	Magruder PT Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	Rob R-bar				
221.99	Acid Soluble Cu, Other (%)	0593	0.0000	0.0000				1			4
241.30	Acid Soluble Fe, ICP, test portion inorganic 965.09 (%)	0354	< 0.01					0			5
241.99	Acid Soluble Fe, Other (%)	0524	0.0003	0.0001				1			0
251.30	Acid Soluble Pb, ICP (ppm)	0593	0.1000	0.0000				2			0
251.30	Acid Soluble Pb, ICP (ppm)	0524	0.1671	0.0313				2			0
251.30	Acid Soluble Pb, ICP (ppm)	0371	< 1					2			5
251.30	Acid Soluble Pb, ICP (ppm)	0605	< 6.25					2			5
251.32	Acid Soluble Pb, ICP, 2006.03 (ppm)	0220	< 0.7					0			5
251.99	Acid Soluble Pb, Other (ppm)	0220	< 0.7					0			5
261.30	Acid Soluble Mn, ICP, test portion 972.02a (%)	0354	< 0.01					0			5
261.99	Acid Soluble Mn, Other (%)	0524	0.0001	0.0000				1			0
261.99	Acid Soluble Mn, Other (%)	0593	0.0000	0.0000				1			4
281.30	Acid Soluble Hg, ICP (ppm)	0371	< 0.05					0			5
281.30	Acid Soluble Hg, ICP (ppm)	0605	< 1.25					0			5
281.99	Acid Soluble Hg, Other (ppm)	0524	0.0006	0.0003				1			0
281.99	Acid Soluble Hg, Other (ppm)	0220	< 0.01					1			5
289.30	Acid Soluble Mo, ICP (ppm)	0593	0.0500	0.0000				2			0
289.30	Acid Soluble Mo, ICP (ppm)	0524	0.0780	0.0167				2			0
289.32	Acid Soluble Mo, ICP, 2006.03 (ppm)	0220	< 0.3					0			5
289.99	Acid Soluble Mo, Other (ppm)	0220	0.4500	0.1000				1			0
291.30	Acid Soluble Ni, ICP (ppm)	0524	0.0835	0.0543				2			0
291.30	Acid Soluble Ni, ICP (ppm)	0593	0.1400	0.0000				2			0
291.30	Acid Soluble Ni, ICP (ppm)	0605	< 1.25					2			5
291.32	Acid Soluble Ni, ICP, 2006.03 (ppm)	0220	0.2000	0.0000				1			0
291.99	Acid Soluble Ni, Other (ppm)	0220	0.3000	0.0000				1			0
301.30	Acid Soluble Se, ICP (ppm)	0524	0.0066	0.0067				2			0
301.30	Acid Soluble Se, ICP (ppm)	0593	0.1000	0.0000				2			0
301.30	Acid Soluble Se, ICP (ppm)	0605	< 6.25					2			5
301.32	Acid Soluble Se, ICP, 2006.03 (ppm)	0220	< 0.3					0			5
301.99	Acid Soluble Se, Other (ppm)	0220	< 0.3					0			5
311.99	Sodium, Other (%)	0354	0.0250	0.0100				1			0
321.30	Acid Soluble Zn, ICP, test portion inorganic 965.09 (%)	0354	< 0.01					0			5
321.99	Acid Soluble Zn, Other (%)	0524	0.0001	0.0000				1			0
321.99	Acid Soluble Zn, Other (%)	0593	0.0000	0.0000				1			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. IA Status describes where your result is relative to the Assigned Value $\pm$ IA. Red indicates Higher or Lower and Green indicates within the IA range about the Robust mean. Method codes in light green indicate a guaranteed analyte. Individual lab values may be below detection limits but are reported solely for