

Analyte PT For All Labs
 Sample # 240213
 Urea 46-0-0

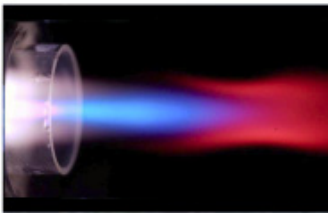
Magruder Fertilizer Proficiency Testing Program
 Regular PT Scheme Sample Doubles with N Scheme
 Statistical Summary

Analytes: 30
 # Labs Reporting: 70
 Issue Date : 03/31/2024

Analyte Code	Analyte Sample # 240213	# 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 (%)	3	3	15.83	26.32	15.83		26.32	18.99	166.22%		0.0339	2.51%
002	Nitrate N (%)	1		0.1000									
003	Water Insoluble N (%)	1		0.8850									
005	Urea N (%)	9	9	42.63	9.361	45.61		1.223	0.5094	2.68%		0.2197	1.48%
007	Urea (%)	3	3	46.02	0.6028	46.02		0.6028	0.4350	1.31%		0.2933	1.47%
008	Biuret (%)	10	9	1.007	0.1463	0.9793		0.1269	0.0529	12.96%		0.0174	4.01%
010	Total N (46%)	64	63	46.18	0.5600	46.21	0.8800	0.4720	0.0743	1.02%	1.25	0.1785	1.47%
020	Total P2O5 (%)	3	3	0.0481	0.0260	0.0481		0.0259	0.0187	53.93%		0.0463	6.31%
041	Direct Available P2O5 (%)	1		0.0400									
050	Soluble K2O (%)	4	4	0.0261	0.0145	0.0261	0.4100	0.0145	0.0091	55.52%	0.08	0.0042	6.92%
060	Water (Free) (%)	12	12	0.1315	0.0916	0.1227		0.0811	0.0293	66.09%		0.0194	5.48%
101	Acid Soluble Ca (%)	1		0.0700									
121	Acid Soluble Mg (%)	2	2	0.0079	0.0101								
148	Total S (%)	2	1	0.0103	0.0004								
149	S - HNO3 soluble (%)	1		0.0067									
151	Acid Soluble As (ppm)	5	2	1.444	2.670	0.0094		0.0037	0.0033	39.12%		0.0038	22.00%
165	Acid Soluble B (%)	1		0.0100									
181	Acid Soluble Cd (ppm)	5	1	0.4114	0.8057	0.0094		0.0037	0.0046	39.12%		0.0036	22.00%
191	Acid Soluble Cr (ppm)	4	1	0.4499	0.5196	0.0094		0.0037	0.0046	39.12%		0.0036	22.00%
202	Acid Soluble Co (ppm)	2	1	0.0604	0.0560								
221	Acid Soluble Cu (%)	1		0.0100									
241	Acid Soluble Fe (%)	2	2	0.0078	0.0102								
251	Acid Soluble Pb (ppm)	5	3	1.084	2.190	0.1386		0.0343	0.0248	24.78%		0.0824	21.54%
261	Acid Soluble Mn (%)	2	1	0.0051	0.0070								
281	Acid Soluble Hg (ppm)	4	2	0.3155	0.6230	0.0010		0.0000	0.0000	3.63%		0.0001	22.00%
289	Acid Soluble Mo (ppm)	3	3	0.1122	0.0334	0.1122	1.0337	0.0334	0.0241	29.74%	0.08	0.0761	22.00%
291	Acid Soluble Ni (ppm)	4	2	0.6917	1.139	0.1333		0.0236	0.0208	17.69%		0.0604	21.66%
301	Acid Soluble Se (ppm)	3	2	0.7000	0.8231	0.2250		0.0354	0.0313	15.71%		0.1500	20.02%
311	Sodium (%)	1		0.0300									

Analyte Code	Analyte Sample # 240213	# 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
321	Acid Soluble Zn (%)	3	2	0.0036	0.0055	0.0004	0.0050	0.0002	0.0002	53.03%	0.10	0.0001	12.98%

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: 30

Sample # 240213

Regular PT Scheme Sample Doubles with N Scheme

Labs Reporting: 70

Urea 46-0-0

Lab Values

Issue Date : 03/31/2024

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 (%)	0136	0.5750	0.0400	15.83	26.32	0.0339	3	-0.58	001.10	0
001	Ammoniacal N (%)	0524	0.7017	0.0316	15.83	26.32	0.0339	3	-0.57	001.99	0
001	Ammoniacal N (%)	0027	46.23	0.0300	15.83	26.32	0.0339	3	1.15	001.99	0
002	Nitrate N (%)	0136	< 0.1					0		002.99	5
003	Water Insoluble N (%)	0136	0.8850	0.0100				1		003.10	0
005	Urea N (%)	0136	17.85	0.7500	45.61	1.223	0.2197	9	-20.96	005.00	0
005	Urea N (%)	0524	42.91	0.1967	45.61	1.223	0.2197	9	-2.04	005.99	0
005	Urea N (%)	0562	45.80	0.0100	45.61	1.223	0.2197	9	0.14	005.99	0
005	Urea N (%)	0564	45.88	0.0600	45.61	1.223	0.2197	9	0.20	005.99	0
005	Urea N (%)	0638	45.89	0.1400	45.61	1.223	0.2197	9	0.21	005.99	0
005	Urea N (%)	0635	46.06	0.2100	45.61	1.223	0.2197	9	0.34	005.99	0
005	Urea N (%)	0619	46.16	0.1300	45.61	1.223	0.2197	9	0.41	005.99	0
005	Urea N (%)	0605	46.52	0.1400	45.61	1.223	0.2197	9	0.69	005.99	0
005	Urea N (%)	0394	46.64	0.5400	45.61	1.223	0.2197	9	0.78	005.10	0
007	Urea (%)	0553	45.45	0.7000	46.02	0.6028	0.2933	3	-0.94	007.99	0
007	Urea (%)	0444	45.95	0.1000	46.02	0.6028	0.2933	3	-0.11	007.99	0
007	Urea (%)	0537	46.65	0.0800	46.02	0.6028	0.2933	3	1.05	007.99	0
008	Biuret (%)	0498	0.7650	0.0300	0.9793	0.1269	0.0174	9	-1.56	008.00	0
008	Biuret (%)	0394	0.8600	0.0200	0.9793	0.1269	0.0174	9	-0.87	008.99	0
008	Biuret (%)	0572	0.9000	0.0000	0.9793	0.1269	0.0174	9	-0.58	008.10	0
008	Biuret (%)	0405	0.9750	0.0100	0.9793	0.1269	0.0174	9	-0.03	008.10	0
008	Biuret (%)	0371	0.9850	0.0100	0.9793	0.1269	0.0174	9	0.04	008.10	0
008	Biuret (%)	0444	1.040	0.0200	0.9793	0.1269	0.0174	9	0.44	008.10	0
008	Biuret (%)	0517	1.060	0.0200	0.9793	0.1269	0.0174	9	0.59	008.10	0
008	Biuret (%)	0513	1.065	0.0100	0.9793	0.1269	0.0174	9	0.62	008.10	0
008	Biuret (%)	0220	1.140	0.0200	0.9793	0.1269	0.0174	9	1.17	008.99	0
008	Biuret (%)	0501	1.280	0.1400	0.9793	0.1269	0.0174	9	2.19	008.00	1
010	Total N (46%)	0025	44.97†	0.2200	46.21	0.4720	0.1785	63	-2.63	010.60	0
010	Total N (46%)	0572	45.08†	0.2500	46.21	0.4720	0.1785	63	-2.40	010.12	0
010	Total N (46%)	0615	45.30†	0.2000	46.21	0.4720	0.1785	63	-1.93	010.99	0
010	Total N (46%)	0553	45.45	0.7000	46.21	0.4720	0.1785	63	-1.61	010.99	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				
010	Total N (46%)	0472	45.50	0.2900	46.21	0.4720	0.1785	63	-1.51	010.60	0
010	Total N (46%)	0234	45.55	0.1000	46.21	0.4720	0.1785	63	-1.40	010.60	0
010	Total N (46%)	0117	45.58	0.5983	46.21	0.4720	0.1785	63	-1.32	010.12	0
010	Total N (46%)	0136	45.60	0.2600	46.21	0.4720	0.1785	63	-1.29	010.60	0
010	Total N (46%)	0307	45.64	0.6100	46.21	0.4720	0.1785	63	-1.22	010.60	0
010	Total N (46%)	0095	45.65	0.2900	46.21	0.4720	0.1785	63	-1.20	010.60	0
010	Total N (46%)	0292	45.68	0.0200	46.21	0.4720	0.1785	63	-1.12	010.60	0
010	Total N (46%)	0055	45.73	0.0650	46.21	0.4720	0.1785	63	-1.01	010.60	0
010	Total N (46%)	0600	45.80	0.2000	46.21	0.4720	0.1785	63	-0.87	010.99	0
010	Total N (46%)	0524	45.88	0.9499	46.21	0.4720	0.1785	63	-0.70	010.99	0
010	Total N (46%)	0498	45.90	0.0000	46.21	0.4720	0.1785	63	-0.66	010.12	0
010	Total N (46%)	0452	45.90	0.5860	46.21	0.4720	0.1785	63	-0.65	010.60	0
010	Total N (46%)	0562	45.91	0.0200	46.21	0.4720	0.1785	63	-0.63	010.99	0
010	Total N (46%)	0560	45.95	0.0500	46.21	0.4720	0.1785	63	-0.56	010.99	0
010	Total N (46%)	0444	45.95	0.1000	46.21	0.4720	0.1785	63	-0.55	010.99	0
010	Total N (46%)	0102	45.96	0.1000	46.21	0.4720	0.1785	63	-0.53	010.60	0
010	Total N (46%)	0402	45.97	0.1170	46.21	0.4720	0.1785	63	-0.50	010.60	0
010	Total N (46%)	0564	46.10	0.0000	46.21	0.4720	0.1785	63	-0.23	010.99	0
010	Total N (46%)	0602	46.15	0.1000	46.21	0.4720	0.1785	63	-0.13	010.12	0
010	Total N (46%)	0534	46.15	0.1000	46.21	0.4720	0.1785	63	-0.13	010.60	0
010	Total N (46%)	0602	46.15	0.1000	46.21	0.4720	0.1785	63	-0.13	010.99	0
010	Total N (46%)	0389	46.16	0.0300	46.21	0.4720	0.1785	63	-0.12	010.60	0
010	Total N (46%)	0619	46.16	0.1300	46.21	0.4720	0.1785	63	-0.12	010.60	0
010	Total N (46%)	0619	46.16	0.1300	46.21	0.4720	0.1785	63	-0.12	010.99	0
010	Total N (46%)	0043	46.16	0.1000	46.21	0.4720	0.1785	63	-0.10	010.60	0
010	Total N (46%)	0593	46.22	0.6100	46.21	0.4720	0.1785	63	0.01	010.60	0
010	Total N (46%)	0517	46.22	0.0800	46.21	0.4720	0.1785	63	0.02	010.99	0
010	Total N (46%)	0177	46.22	0.1880	46.21	0.4720	0.1785	63	0.03	010.60	0
010	Total N (46%)	0231	46.23	0.2800	46.21	0.4720	0.1785	63	0.04	010.60	0
010	Total N (46%)	0023	46.28	0.3780	46.21	0.4720	0.1785	63	0.14	010.60	0
010	Total N (46%)	0588	46.28	1.260	46.21	0.4720	0.1785	63	0.15	010.60	0
010	Total N (46%)	0513	46.29	0.0200	46.21	0.4720	0.1785	63	0.17	010.99	0
010	Total N (46%)	0220	46.35	0.1200	46.21	0.4720	0.1785	63	0.30	010.60	0
010	Total N (46%)	0324	46.35	0.1000	46.21	0.4720	0.1785	63	0.30	010.60	0
010	Total N (46%)	0423	46.35	0.0400	46.21	0.4720	0.1785	63	0.30	010.60	0
010	Total N (46%)	0169	46.36	0.0200	46.21	0.4720	0.1785	63	0.32	010.60	0
010	Total N (46%)	0371	46.38	0.0200	46.21	0.4720	0.1785	63	0.36	010.60	0
010	Total N (46%)	0586	46.42	0.1200	46.21	0.4720	0.1785	63	0.45	010.60	0
010	Total N (46%)	0029	46.44	0.0600	46.21	0.4720	0.1785	63	0.49	010.60	0
010	Total N (46%)	0521	46.45	0.0000	46.21	0.4720	0.1785	63	0.51	010.60	0
010	Total N (46%)	0405	46.46	0.0100	46.21	0.4720	0.1785	63	0.52	010.60	0
010	Total N (46%)	0157	46.50	0.2000	46.21	0.4720	0.1785	63	0.62	010.60	0
010	Total N (46%)	0451	46.50	0.2000	46.21	0.4720	0.1785	63	0.62	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 (46%)	0377	46.54	0.4900	46.21	0.4720	0.1785	63	0.69	010.60	0
010	Total N (46%)	0042	46.55	0.3100	46.21	0.4720	0.1785	63	0.71	010.60	0
010	Total N (46%)	0354	46.55	0.1000	46.21	0.4720	0.1785	63	0.72	010.60	0
010	Total N (46%)	0523	46.58	0.0350	46.21	0.4720	0.1785	63	0.78	010.60	0
010	Total N (46%)	0561	46.61	0.0500	46.21	0.4720	0.1785	63	0.84	010.60	0
010	Total N (46%)	0501	46.63	0.2100	46.21	0.4720	0.1785	63	0.88	010.60	0
010	Total N (46%)	0494	46.70	0.1000	46.21	0.4720	0.1785	63	1.04	010.60	0
010	Total N (46%)	0291	46.72	0.0200	46.21	0.4720	0.1785	63	1.08	010.60	0
010	Total N (46%)	0527	46.73	0.2700	46.21	0.4720	0.1785	63	1.10	010.60	0
010	Total N (46%)	0131	46.74	0.0270	46.21	0.4720	0.1785	63	1.13	010.60	0
010	Total N (46%)	0368	46.77	0.6570	46.21	0.4720	0.1785	63	1.19	010.60	0
010	Total N (46%)	0040	46.80	0.2000	46.21	0.4720	0.1785	63	1.25	010.60	0
010	Total N (46%)	0422	46.97	0.0300	46.21	0.4720	0.1785	63	1.60	010.60	0
010	Total N (46%)	0114	47.17‡	0.3300	46.21	0.4720	0.1785	63	2.02	010.60	0
010	Total N (46%)	0255	47.32‡	0.4320	46.21	0.4720	0.1785	63	2.36	010.60	0
010	Total N (46%)	0049	47.65‡	0.0600	46.21	0.4720	0.1785	63	3.05	010.60	0
010	Total N (46%)	0073	44.20†	3.920	46.21	0.4720	0.1785	63	-4.26	010.60	1
020	Total P2O5 (%)	0524	0.0284	0.0029	0.0481	0.0259	0.0463	3	-0.76	020.50	0
020	Total P2O5 (%)	0422	0.0385	0.0110	0.0481	0.0259	0.0463	3	-0.37	020.50	0
020	Total P2O5 (%)	0588	0.0775	0.1250	0.0481	0.0259	0.0463	3	1.13	020.50	0
041	Direct Available P2O5 (%)	0354	0.0400	0.0060				1		041.21	0
050	Soluble K2O (%)	0354	0.0150	0.0060	0.0261	0.0145	0.0042	4	-0.77	050.52	0
050	Soluble K2O (%)	0524	0.0150	0.0078	0.0261	0.0145	0.0042	4	-0.77	050.99	0
050	Soluble K2O (%)	0422	0.0290	0.0020	0.0261	0.0145	0.0042	4	0.20	050.50	0
050	Soluble K2O (%)	0588	0.0455	0.0010	0.0261	0.0145	0.0042	4	1.34	050.99	0
060	Water (Free) (%)	0586	0.0400	0.0600	0.1227	0.0811	0.0194	12	-1.02	060.99	0
060	Water (Free) (%)	0561	0.0450	0.0100	0.1227	0.0811	0.0194	12	-0.96	060.00	0
060	Water (Free) (%)	0220	0.0585	0.0110	0.1227	0.0811	0.0194	12	-0.79	060.00	0
060	Water (Free) (%)	0405	0.0700	0.0000	0.1227	0.0811	0.0194	12	-0.65	060.00	0
060	Water (Free) (%)	0485	0.0700	0.0200	0.1227	0.0811	0.0194	12	-0.65	060.00	0
060	Water (Free) (%)	0136	0.1000	0.0200	0.1227	0.0811	0.0194	12	-0.28	060.99	0
060	Water (Free) (%)	0234	0.1200	0.0200	0.1227	0.0811	0.0194	12	-0.03	060.20	0
060	Water (Free) (%)	0498	0.1400	0.0200	0.1227	0.0811	0.0194	12	0.21	060.99	0
060	Water (Free) (%)	0513	0.1605	0.0010	0.1227	0.0811	0.0194	12	0.47	060.20	0
060	Water (Free) (%)	0517	0.1945	0.0110	0.1227	0.0811	0.0194	12	0.88	060.20	0
060	Water (Free) (%)	0593	0.2300	0.0400	0.1227	0.0811	0.0194	12	1.32	060.30	0
060	Water (Free) (%)	0371	0.3500	0.0000	0.1227	0.0811	0.0194	12	2.80	060.20	0
101	Acid Soluble Ca (%)	0354	0.0700	0.0200				1		101.30	0
121	Acid Soluble Mg (%)	0524	0.0007	0.0000				2		121.99	0
121	Acid Soluble Mg (%)	0354	0.0150	0.0100				2		121.30	0
148	Total S (%)	0422	0.0105	0.0010				1		148.99	0
148	Total S (%)	0354	< 0.01					1		148.99	5
149	S - HNO3 soluble (%)	0524	0.0067	0.0003				1		149.04	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				
151	Acid Soluble As (ppm)	0524	0.0068	0.0036				2		151.30	0
151	Acid Soluble As (ppm)	0630	0.0120	0.0040				2		151.30	0
151	Acid Soluble As (ppm)	0220	< 0.5					2		151.32	5
151	Acid Soluble As (ppm)	0220	< 0.5					2		151.99	5
151	Acid Soluble As (ppm)	0605	< 6.2					2		151.30	5
165	Acid Soluble B (%)	0354	< 0.01					0		165.30	5
181	Acid Soluble Cd (ppm)	0524	0.0044	0.0024				1		181.30	0
181	Acid Soluble Cd (ppm)	0630	0.0025	0.0050				1		181.30	4
181	Acid Soluble Cd (ppm)	0220	< 0.1					1		181.32	5
181	Acid Soluble Cd (ppm)	0220	< 0.1					1		181.99	5
181	Acid Soluble Cd (ppm)	0605	< 1.85					1		181.30	5
191	Acid Soluble Cr (ppm)	0524	0.3996	0.1057				1		191.30	0
191	Acid Soluble Cr (ppm)	0220	< 0.1					1		191.32	5
191	Acid Soluble Cr (ppm)	0220	< 0.1					1		191.99	5
191	Acid Soluble Cr (ppm)	0605	< 1.2					1		191.30	5
202	Acid Soluble Co (ppm)	0524	0.0208	0.0212				1		202.30	0
202	Acid Soluble Co (ppm)	0220	< 0.1					1		202.32	5
221	Acid Soluble Cu (%)	0354	< 0.01					0		221.30	5
241	Acid Soluble Fe (%)	0524	0.0007	0.0003				2		241.99	0
241	Acid Soluble Fe (%)	0354	0.0150	0.0100				2		241.30	0
251	Acid Soluble Pb (ppm)	0220	0.1000	0.0000	0.1386	0.0343	0.0824	3	-1.12	251.32	0
251	Acid Soluble Pb (ppm)	0220	0.1500	0.1000	0.1386	0.0343	0.0824	3	0.33	251.99	0
251	Acid Soluble Pb (ppm)	0524	0.1658	0.0648	0.1386	0.0343	0.0824	3	0.79	251.30	0
251	Acid Soluble Pb (ppm)	0630	0.0025	0.0050	0.1386	0.0343	0.0824	3		251.30	4
251	Acid Soluble Pb (ppm)	0605	< 5		0.1386	0.0343	0.0824	3		251.30	5
261	Acid Soluble Mn (%)	0524	0.0001	0.0000				1		261.99	0
261	Acid Soluble Mn (%)	0354	< 0.01					1		261.30	5
281	Acid Soluble Hg (ppm)	0524	0.0010	0.0001				2		281.99	0
281	Acid Soluble Hg (ppm)	0630	0.0010	0.0000				2		281.30	0
281	Acid Soluble Hg (ppm)	0220	< 0.01					2		281.99	5
281	Acid Soluble Hg (ppm)	0605	< 1.25					2		281.30	5
289	Acid Soluble Mo (ppm)	0524	0.0867	0.0522	0.1122	0.0334	0.0761	3	-0.77	289.30	0
289	Acid Soluble Mo (ppm)	0220	0.1000	0.0000	0.1122	0.0334	0.0761	3	-0.37	289.32	0
289	Acid Soluble Mo (ppm)	0220	0.1500	0.1000	0.1122	0.0334	0.0761	3	1.13	289.99	0
291	Acid Soluble Ni (ppm)	0524	0.1167	0.0207				2		291.30	0
291	Acid Soluble Ni (ppm)	0220	0.1500	0.1000				2		291.99	0
291	Acid Soluble Ni (ppm)	0220	< 0.1					2		291.32	5
291	Acid Soluble Ni (ppm)	0605	< 2.4					2		291.30	5
301	Acid Soluble Se (ppm)	0220	0.2000	0.2000				2		301.32	0
301	Acid Soluble Se (ppm)	0220	0.2500	0.1000				2		301.99	0
301	Acid Soluble Se (ppm)	0605	< 1.65					2		301.30	5
311	Sodium (%)	0354	0.0300	0.0000				1		311.99	0
321	Acid Soluble Zn (%)	0220	0.0003	0.0001				2		321.32	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				
321	Acid Soluble Zn (%)	0524	0.0006	0.0001				2		321.99	0
321	Acid Soluble Zn (%)	0354	< 0.01					2		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.