

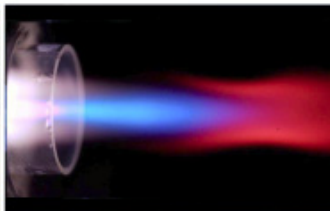
Analyte PT For All Labs
 Sample # 230631
 Granular Urea 46-0-0

Magruder Fertilizer Proficiency Testing Program
Nitrogen Select PT Scheme
Statistical Summary

Analytes: 4
 # Labs Reporting: 12
 Issue Date : 07/31/2023

Analyte Code	Analyte Sample # 230631	# 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
005	Urea N (%)	1		46.05									
008	Biuret (%)	5	5	0.9849	0.0925	0.9849		0.0925	0.0517	9.39%		0.0142	4.01%
010	Total N (46%)	12	11	237.4	661.6	46.43	0.8800	0.3472	0.1309	0.75%	0.92	0.1581	1.47%
060	Water (Free) (%)	6	6	0.1899	0.0773	0.1899		0.0877	0.0448	46.18%		0.0153	5.14%

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 using the Thompson Modification, Analyst,2000,125,385-386.



Analyte PT For All Labs

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Lab Values

Issue Date : 07/31/2023

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	R-bar				
005	Urea N (%)	0626	46.05	0.0000				1	005.99	0	
008	Biuret (%)	0626	0.8660	0.0260	0.9849	0.0925	0.0142	5	-1.29	008.99	0
008	Biuret (%)	0626	0.9085	0.0050	0.9849	0.0925	0.0142	5	-0.83	008.10	0
008	Biuret (%)	0371	1.020	0.0200	0.9849	0.0925	0.0142	5	0.38	008.10	0
008	Biuret (%)	0513	1.055	0.0100	0.9849	0.0925	0.0142	5	0.76	008.10	0
008	Biuret (%)	0405	1.075	0.0100	0.9849	0.0925	0.0142	5	0.97	008.10	0
010	Total N (46%)	0086	45.94	0.7560	46.43	0.3472	0.1581	11	-1.40	010.60	0
010	Total N (46%)	0561	46.11	0.0500	46.43	0.3472	0.1581	11	-0.94	010.60	0
010	Total N (46%)	0626	46.11	0.0200	46.43	0.3472	0.1581	11	-0.93	010.10	0
010	Total N (46%)	0405	46.36	0.0200	46.43	0.3472	0.1581	11	-0.21	010.60	0
010	Total N (46%)	0513	46.37	0.0600	46.43	0.3472	0.1581	11	-0.18	010.99	0
010	Total N (46%)	0220	46.45	0.0100	46.43	0.3472	0.1581	11	0.04	010.99	0
010	Total N (46%)	0494	46.52	0.4200	46.43	0.3472	0.1581	11	0.25	010.60	0
010	Total N (46%)	0371	46.53	0.1500	46.43	0.3472	0.1581	11	0.27	010.60	0
010	Total N (46%)	0586	46.57	0.0700	46.43	0.3472	0.1581	11	0.38	010.60	0
010	Total N (46%)	0040	46.85	0.3000	46.43	0.3472	0.1581	11	1.21	010.60	0
010	Total N (46%)	0615	47.03	0.2100	46.43	0.3472	0.1581	11	1.71	010.99	0
010	Total N (46%)	0042	2,338‡	4,584	46.43	0.3472	0.1581	11	6600.56	010.60	1
060	Water (Free) (%)	0586	0.0700	0.0200	0.1899	0.0877	0.0153	6	-1.22	060.99	0
060	Water (Free) (%)	0405	0.1200	0.0000	0.1899	0.0877	0.0153	6	-0.71	060.00	0
060	Water (Free) (%)	0371	0.2150	0.0100	0.1899	0.0877	0.0153	6	0.25	060.20	0
060	Water (Free) (%)	0513	0.2295	0.0010	0.1899	0.0877	0.0153	6	0.40	060.20	0
060	Water (Free) (%)	0626	0.2350	0.0300	0.1899	0.0877	0.0153	6	0.46	060.20	0
060	Water (Free) (%)	0561	0.2700	0.0000	0.1899	0.0877	0.0153	6	0.81	060.00	0

Interpreting Z Scores and Flags:

Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or -2 and -3 (warning) and Green = Z < 2 and >-2 (OK at 95%). Flags indicate data usage: 0 = Used, 1 = rejected for duplicates too far apart, 2 = rejected as extreme outlier, 3 = removed from stats, 4 = rejected due to 0s submitted and 5 = LOD. A 9 flag indicates a data problem - scores not calculated.

Notes:

Robust statistics not used if < 6 labs used in calculations, in this case Values and Z Scores are grayed out and should be interpreted with extreme caution. 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

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	R-bar				

detection limits but are reported solely for the purpose of this Proficiency Testing program.