

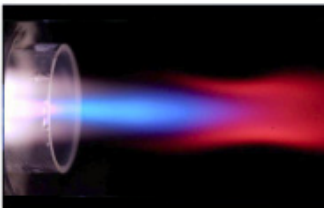
Analyte PT For All Labs
 Sample # 220631
 32-0-0 UAN Solution

Magruder Fertilizer Proficiency Testing Program
Nitrogen Select PT Scheme
Statistical Summary

Analytes: 8
 # Labs Reporting: 24
 Issue Date : 07/31/2022

Analyte Code	Analyte Sample # 220631	# 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 (%)	10	8	12.08	11.88	8.206		0.3889	0.1719	4.74%		0.0425	2.91%
002	Nitrate N (%)	8	8	11.15	8.419	8.304		0.6099	0.2695	7.34%		0.0713	2.91%
005	Urea N (%)	8	8	18.15	6.462	16.07		0.6902	0.3050	4.30%		0.0375	2.49%
006	Biuret N (%)	1		1.015									
007	Urea (%)	1		33.35									
008	Biuret (%)	3	3	0.4567	0.3075	0.4567		0.3075	0.2219	67.34%		0.0267	4.50%
009	Ammoniacal Plus Nitrate N (%)	1		16.09									
010	Total N (32%)	24	23	32.01	0.6493	32.05	0.8800	0.3588	0.0935	1.12%	0.95	0.1080	1.77%

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

Magruder Fertilizer Proficiency Testing Program

Analytes: 8

Sample # 220631

Nitrogen Select PT Scheme

Labs Reporting: 24

32-0-0 UAN Solution

Lab Values

Issue Date : 07/31/2022

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001	Ammoniacal N (%)	0594	7.840	0.0000	8.206	0.3889	0.0425	8	-0.86	001.99	0
001	Ammoniacal N (%)	0405	7.945	0.0100	8.206	0.3889	0.0425	8	-0.61	001.99	0
001	Ammoniacal N (%)	0371	8.000	0.0000	8.206	0.3889	0.0425	8	-0.48	001.99	0
001	Ammoniacal N (%)	0027	8.030	0.0000	8.206	0.3889	0.0425	8	-0.41	001.99	0
001	Ammoniacal N (%)	0513	8.045	0.0300	8.206	0.3889	0.0425	8	-0.38	001.99	0
001	Ammoniacal N (%)	0585	8.435	0.0100	8.206	0.3889	0.0425	8	0.54	001.99	0
001	Ammoniacal N (%)	0585	8.565	0.2700	8.206	0.3889	0.0425	8	0.84	001.10	0
001	Ammoniacal N (%)	0220	9.530	0.0200	8.206	0.3889	0.0425	8	3.11	001.99	0
001	Ammoniacal N (%)	0498	8.600	1.000	8.206	0.3889	0.0425	8	0.93	001.10	1
001	Ammoniacal N (%)	0599	45.86	0.0300	8.206	0.3889	0.0425	8	88.55	001.99	2
002	Nitrate N (%)	0027	7.610	0.1600	8.304	0.6099	0.0713	8	-1.04	002.99	0
002	Nitrate N (%)	0594	7.840	0.0000	8.304	0.6099	0.0713	8	-0.70	002.99	0
002	Nitrate N (%)	0371	8.000	0.0000	8.304	0.6099	0.0713	8	-0.46	002.99	0
002	Nitrate N (%)	0513	8.045	0.0300	8.304	0.6099	0.0713	8	-0.39	002.99	0
002	Nitrate N (%)	0498	8.300	0.2000	8.304	0.6099	0.0713	8	-0.01	002.99	0
002	Nitrate N (%)	0585	8.685	0.1300	8.304	0.6099	0.0713	8	0.57	002.20	0
002	Nitrate N (%)	0585	8.735	0.0500	8.304	0.6099	0.0713	8	0.65	002.99	0
002	Nitrate N (%)	0599	31.96	0.0000	8.304	0.6099	0.0713	8	35.48	002.99	0
005	Urea N (%)	0585	14.71	0.0400	16.07	0.6902	0.0375	8	-1.80	005.99	0
005	Urea N (%)	0513	15.56	0.0400	16.07	0.6902	0.0375	8	-0.67	005.99	0
005	Urea N (%)	0027	15.91	0.0300	16.07	0.6902	0.0375	8	-0.21	005.99	0
005	Urea N (%)	0220	16.03	0.0500	16.07	0.6902	0.0375	8	-0.05	005.00	0
005	Urea N (%)	0405	16.14	0.0100	16.07	0.6902	0.0375	8	0.09	005.99	0
005	Urea N (%)	0371	16.35	0.1000	16.07	0.6902	0.0375	8	0.38	005.99	0
005	Urea N (%)	0594	16.42	0.0000	16.07	0.6902	0.0375	8	0.47	005.99	0
005	Urea N (%)	0599	34.09	0.0300	16.07	0.6902	0.0375	8	23.88	005.99	0
006	Biuret N (%)	0585	1.015	0.0100				1		006.10	0
007	Urea (%)	0513	33.35	0.0900				1		007.99	0
008	Biuret (%)	0220	0.1500	0.0400	0.4567	0.3075	0.0267	3	-1.00	008.99	0
008	Biuret (%)	0498	0.4550	0.0300	0.4567	0.3075	0.0267	3	-0.01	008.00	0
008	Biuret (%)	0450	0.7650	0.0100	0.4567	0.3075	0.0267	3	1.00	008.10	0
009	Ammoniacal Plus Nitrate N (%)	0513	16.09	0.0600				1		009.99	0

Analyte Group	Analyte (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010	Total N (32%)	0493	29.85†	0.1000	32.05	0.3588	0.1080	23	-6.14	010.99	0
010	Total N (32%)	0042	31.00†	0.2000	32.05	0.3588	0.1080	23	-2.94	010.60	0
010	Total N (32%)	0498	31.45	0.1000	32.05	0.3588	0.1080	23	-1.68	010.12	0
010	Total N (32%)	0421	31.71	0.2400	32.05	0.3588	0.1080	23	-0.96	010.60	0
010	Total N (32%)	0025	31.82	0.0700	32.05	0.3588	0.1080	23	-0.66	010.60	0
010	Total N (32%)	0450	31.95	0.0900	32.05	0.3588	0.1080	23	-0.30	010.60	0
010	Total N (32%)	0585	31.97	0.0200	32.05	0.3588	0.1080	23	-0.23	010.99	0
010	Total N (32%)	0595	31.97	0.0000	32.05	0.3588	0.1080	23	-0.23	010.99	0
010	Total N (32%)	0356	31.98	0.1030	32.05	0.3588	0.1080	23	-0.21	010.60	0
010	Total N (32%)	0585	31.98	0.1400	32.05	0.3588	0.1080	23	-0.20	010.17	0
010	Total N (32%)	0576	32.00	0.0000	32.05	0.3588	0.1080	23	-0.15	010.99	0
010	Total N (32%)	0513	32.02	0.0300	32.05	0.3588	0.1080	23	-0.11	010.99	0
010	Total N (32%)	0405	32.03	0.0000	32.05	0.3588	0.1080	23	-0.07	010.60	0
010	Total N (32%)	0027	32.05	0.5000	32.05	0.3588	0.1080	23	-0.01	010.60	0
010	Total N (32%)	0594	32.10	0.0000	32.05	0.3588	0.1080	23	0.13	010.99	0
010	Total N (32%)	0220	32.13	0.0500	32.05	0.3588	0.1080	23	0.20	010.60	0
010	Total N (32%)	0073	32.21	0.1000	32.05	0.3588	0.1080	23	0.44	010.60	0
010	Total N (32%)	0579	32.31	0.0200	32.05	0.3588	0.1080	23	0.70	010.60	0
010	Total N (32%)	0371	32.35	0.1000	32.05	0.3588	0.1080	23	0.83	010.99	0
010	Total N (32%)	0593	32.44	0.0300	32.05	0.3588	0.1080	23	1.06	010.60	0
010	Total N (32%)	0040	32.55	0.1000	32.05	0.3588	0.1080	23	1.38	010.60	0
010	Total N (32%)	0586	32.56	0.3300	32.05	0.3588	0.1080	23	1.40	010.60	0
010	Total N (32%)	0561	33.58‡	0.1600	32.05	0.3588	0.1080	23	4.25	010.60	0
010	Total N (32%)	0494	32.26	1.110	32.05	0.3588	0.1080	23	0.56	010.60	1

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