

magruder fertilizer check sample program

Sample # 180211: Grade 14-14-14
Method Report Card for Lab Code 0494

STRIVING FOR EXCELLENCE IN ANALYSIS

Proficiency For 22 Methods

Issue Date : 03/31/2018

Method Code	Analyte Name and Method (Units)	Lab 0494 Data		Method Values				Magruder	Method IA	Flag
		Value	range	Rob Mean	Rob SD	R-bar	# Tests	Z Score	Status	
010.60	Total Nitrogen, Combustion (14%)	13.89	0.1300	13.83	0.1696	0.1101	60	0.30	OK	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (14%)	14.35	0.4100	14.54	0.1712	0.2595	5	-1.16		0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (14%)	14.51	0.8100	14.36	0.4084	0.1400	10	0.34	OK	1
050.00	Soluble Potassium as K2O, STPB Oxalate (14%)	15.00	0.0100	14.52	0.3421	0.0500	11	1.31	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (14%)	14.20	0.3800	14.52	0.5468	0.2558	12	-0.58	OK	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0.2810	0.0051	0.2990	0.0295	0.0042	3	-0.61		0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1%)	0.5679	0.0100	0.5773	0.0315	0.0096	9	-0.28	OK	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7.75%)	10.30	0.7526	10.33	0.8335	0.3663	15	-0.03	OK	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	179.8	7.566	170.0	9.408	6.345	5	1.04		0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.2%)	0.2186	0.0010	0.2095	0.0128	0.0028	13	0.71	OK	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	207.0	17.91	197.6	7.948	14.34	5	1.19		0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	603.8	16.94	619.6	19.71	29.26	5	-0.80		0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	395.4	10.33	374.0	26.97	9.178	7	0.72	OK	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (0.06%)	0.1216	0.0095	0.1305	0.0081	0.0061	10	-1.02	OK	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (1%)	0.7003	0.0163	0.6903	0.0418	0.0258	12	0.24	OK	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	938.1	9.368	964.0	81.29	73.36	5	-0.32		0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.16%)	0.1579	0.0015	0.1599	0.0097	0.0052	11	-0.22	OK	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (50ppm)	844.5	55.00	869.4	56.77	31.37	8	-0.40	OK	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	16.96	1.691	15.65	1.194	2.275	5	1.10		0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified... (ppm)	318.1	1.352	333.2	13.74	20.57	5	-1.09		0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0.4064	0.0456	0.4660	0.0745	0.0303	6	-0.71	Low	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (0.13%)	0.1956	0.0018	0.1953	0.0195	0.0103	11	0.01	OK	0

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 and a 4 flag indicates rejected due to 0 value/s submitted. The 9 Flag indicates a data problem - scores not calculated. Robust statistics not used if < 6 labs used in calculations, in this case the Z Scores are grey and included for information only. Method codes in light green indicate a guaranteed analyte. Lab values below detection limits reported solely for this PT program. IA Status describes where your result is relative to the Robust Mean ± IA. Green is within the IA range and Red is Higher or Lower than IA range.