



Magruder Certificate of Analysis

Magruder Sample #200511 Grade 8-5-5 Organic

Analyte	Value	± Standard Uncertainty	# Labs
Total N (8%)	8.635	0.022	59
Total P2O5 (%)	4.618	0.096	35
Direct Available P2O5 (5%)	4.193	0.124	34
Soluble K2O (5%)	6.706	0.128	61
Acid Soluble Ca (4.5%)	3.824	0.052	39
Acid Soluble Mg (%)	0.1968	0.0073	16
Total S (1%)	2.751	0.116	35
Acid Soluble Cu (%)	0.00143	0.00015	16
Acid Soluble Zn (%)	0.00952	0.00025	21

1. Data obtained from participant results in the Magruder Check Sample Program.
2. Guaranteed concentrations noted by the value preceding the unit in Analyte name.
3. Values are robust means. Standard uncertainty determined as $1.25 \times \text{robust standard deviation} / \sqrt{\text{\#Labs}}$. Results only shown for analytes tested by 16 or more labs. Values and uncertainties for analytes tested by less than 16 labs are available in Analyte Reports.
4. Technical information on Certificate of Analysis available at www.magruderchecksample.org/prod/Articles.html