



Magruder Certificate of Analysis

Magruder Sample #201111 Ca-Mg-S-B

Analyte	Value	± Standard Uncertainty	# Labs
Total N (1%)	1.793	0.015	74
Acid Soluble Ca (10%)	9.839	0.095	74
Acid Soluble Mg (5%)	4.378	0.071	72
Total S (1.5%)	3.355	0.049	49
Acid Soluble B (10%)	9.791	0.101	57
Acid Soluble Cr (ppm)	19.08	1.81	16
Acid Soluble Cu (%)	0.04262	0.00125	27
Acid Soluble Fe (%)	0.5368	0.0153	18
Acid Soluble Mn (%)	0.2783	0.0087	17
Acid Soluble Ni (ppm)	14.39	1.39	17
Acid Soluble Zn (%)	0.5140	0.0099	28

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 $1.25 \times \text{robust standard deviation} / \sqrt{\#Labs}$. 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