



Magruder Certificate of Analysis

Magruder Sample #220511 Grade 21-7-14

Analyte	Value	± Uncertainty	# Labs
Ammoniacal N (%)	11.04	0.058	25
Nitrate N (%)	9.864	0.081	20
Total N (21%)	20.73	0.072	70
Total P2O5 (%)	7.002	0.055	40
Direct Available P2O5 (7%)	7.008	0.050	46
Soluble K2O (14%)	14.67	0.081	78
Total S (5.1%)	5.315	0.044	51
Acid Soluble Cr (ppm)	16.66	1.03	16
Acid Soluble Cu (%)	0.00123	0.00015	21
Acid Soluble Zn (%)	0.00828	0.00077	25

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. 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.