



# Magruder Certificate of Analysis

## Magruder Sample #220411 Grade 24-25-4

Analyte	Value	± Uncertainty	# Labs
Ammoniacal N (%)	5.582	0.136	27
Total N (24%)	24.63	0.058	81
Total P2O5 (%)	25.22	0.15	46
Direct Available P2O5 (25%)	25.06	0.078	51
Soluble K2O (4%)	4.139	0.029	82
Acid Soluble As (ppm)	7.725	0.512	16
Acid Soluble Cd (ppm)	1.730	0.062	22
Acid Soluble Cr (ppm)	46.23	1.46	19
Acid Soluble Co (ppm)	1.670	0.109	16
Acid Soluble Fe (%)	0.5789	0.0071	16
Acid Soluble Mo (ppm)	6.389	0.280	16
Acid Soluble Ni (ppm)	6.820	0.338	20
Acid Soluble Zn (%)	0.00511	0.00024	30

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.