



**Certificate Of Analysis
(COA)
Charge Coarse**

Parameter	Level	Unit
Humic Acid	≥ 90	% Colorimetric
	≥ 64	% ISO 19822:2018
Fulvic Acid	3.0	% ISO 19822:2018
pH	4.5	SU
Moisture	28-32	%
Electric Conductivity (EC)	0.15	dS/m
Cation Exchange Capacity (CEC)	200-400	meq/ 100g
Total Carbon	51	%
Total Organic Carbon	40	%
Total Organic Matter (OM)	63	%
Ash Content	18	%
Total Nitrogen (N)	1.50	%
C:N Ratio	34:1	
Water Solubility	19	%
Macro & Micro-Elements		
Phosphorus, P	0.02	%
Potassium, K ₂ O	0.04	%
Magnesium, Mg	0.11	%
Manganese, MN	180	ppm
Boron, B	86	ppm
Zinc, Zn	8	ppm
Iron, Fe	2200	ppm
Calcium, Ca	0.98	%
Copper, Cu	1.70	ppm
Molybdenum, Mo	1.20	ppm
Selenium, Se	2.80	ppm
Silicon, Si	390	ppm
Sulfur, S	0.33	%
Sodium, Na	0.11	%
Heavy Metals		
Lead, Pb	3.30	ppm
Mercury, Hg	<0.1	ppm
Aluminum, Al	0.50	%
Arsenic, As	1.70	ppm
Chromium, Cr	2.40	ppm

Sources: A & L Laboratories, October 15, 2024.