

ENVIRONMENTAL ANALYSIS LABORATORY  
DEPARTMENT OF BIOLOGICAL AND AGRICULTURAL ENGINEERING  
NORTH CAROLINA STATE UNIVERSITY

**Analysis Cost Sheet**

Effective 8/18/2016

Analysis	Units	Internal Rates, \$		External Rates, \$	
		Liquid	Solid	Liquid	Solid
TKN (Org-N+NH <sub>3</sub> N)	mg/L, mg/kg	3.26	6.53	7.50	12.50
Total N (inc NO <sub>3</sub> -N)	mg/L, mg/kg	3.26	6.53	7.50	12.50
NH <sub>3</sub> N	mg/L, mg/kg	2.19	6.53	5.50	12.50
NO <sub>3</sub> N+NO <sub>2</sub> N	mg/L, mg/kg	2.19	6.53	5.50	12.50
NO <sub>2</sub> -N	mg/L, mg/kg	2.19	6.53	5.50	12.50
Total P	mg/L, mg/kg	3.26	6.53	7.50	12.50
Ortho Phosphate	mg/L, mg/kg	2.19	6.53	5.50	12.50
Chloride	mg/L, mg/kg	4.37	6.53	5.50	12.50
SO <sub>4</sub> = (soluble inorganic)	mg/L, mg/kg	4.30	6.46	5.50	12.50
Total Solids - Moisture Content	%	2.15	2.15	3.40	3.40
Volatile Solids	%	2.15	2.15	3.40	3.40
Total Suspended Solids	mg/L	2.15	N/A	3.40	N/A
Volatile Suspended Solids	mg/L	2.15	N/A	3.40	N/A
Conductivity	umhos/cm	2.15	3.00	3.40	5.50
pH	pH units	2.15	3.00	3.40	5.50
Volume	mL or L	2.15	2.15	3.40	3.40
C/N Leco (solids)	%	N/A	12.00	N/A	15.00
Total Carbon	mg/L	3.45	N/A	8.00	N/A
Total Organic Carbon	mg/L	3.45	N/A	8.00	N/A
Total COD	mg/L	2.15	N/A	6.50	N/A
Soluble COD	mg/L	3.15	N/A	10.00	N/A
Alkalinity	mg equiv, CaCO <sub>3</sub> /L	2.15	N/A	3.40	N/A
Hardness	mg equiv, CaCO <sub>3</sub> /L	1.40	N/A	3.00	N/A
<b>METALS (reported as Total)</b>					
Na - Sodium	mg/L, mg/kg	5.78	7.93	8.00	12.00
K - Potassium	mg/L, mg/kg	5.78	7.93	8.00	12.00
Ca - Calcium	mg/L, mg/kg	5.78	7.93	8.00	12.00
Mg - Magnesium	mg/L, mg/kg	5.78	7.93	8.00	12.00
Cu - Copper	mg/L, mg/kg	5.78	7.93	8.00	12.00
Zn - Zinc	mg/L, mg/kg	5.78	7.93	8.00	12.00
Fe - Iron	mg/L, mg/kg	5.78	7.93	8.00	12.00
Mn - Manganese	mg/L, mg/kg	5.78	7.93	8.00	12.00
Ni - Nickel	mg/L, mg/kg	5.78	7.93	8.00	12.00
Cd - Cadmium	mg/L, mg/kg	5.78	7.93	8.00	12.00
Cr - Chromium	mg/L, mg/kg	5.78	7.93	8.00	12.00
Pb - Lead	mg/L, mg/kg	5.78	7.93	8.00	12.00
Bulk Density	g/ per 50mL	N/A	2.15	N/A	3.40
Grinding	N/A	N/A	2.07	N/A	3.00

**Contact:** Cong Tu/ Research Operaitons Manager (cong\_tu@ncsu.edu) 919-515-6766