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Prepared For	
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ATHENS HOCKING RECYCLING	
CENTE	
5991 INDUSTRIAL DR.	

ATHENS HOCKING RECYCLING CENTER 5991 INDUSTRIAL DRIVE ATHENS, OH 45701

Sample Information				
Sample Description Sample Type Lab Number	COMPOST JUNE 24 Greenhouse FF66601	Sampled Tested	06-06-2024 06-18-2024	

Certificate of Analysis

Analysis	Method	Result		As Rcvd	EPA Limit
Moisture	AOAC 965.08	20.16			
pH (1:5)	TMECC 04 11-A	7.5			
Salinity (1:5)	TMECC 04 10-A	0.48	mS/cm		
Nitrogen, Total	AOAC 993.13	2.43	%	1.94	
Carbon to Nitrogen Ratio	TMECC 05.02A	16.8			
Phosphorus, Total	6010D	15480	mg/Kg	12400	
Potassium, Total	6010D	14720	mg/Kg	11800	
Carbon	3050B, 9060A	40.83		32.60	
Boron	3050B, 6010D	104	mg/Kg	83	
Arsenic	3050B, 6010D	0.59	mg/Kg		41
Cadmium	3050B, 6010D	0.59	mg/Kg		39
Copper	3050B, 6010D	11	mg/Kg		1500
Lead	3050B, 6010D		mg/Kg		300
Mercury	7471B	< 0.2	mg/Kg		17
Nickel	3050B, 6010D		mg/Kg		420
Selenium	3050B, 6010D	0.86	mg/Kg		36
Zinc	3050B, 6010D	48	mg/Kg		2800
Solvita, NH4	TMECC 05.08	5	index		
Solvita, Maturity Index	TMECC 05.08	6	index		
Solvita CO2	TMECC 05.08	6	index		
Fecal Coliforms (MPN)	SM-9221E TMEC		org/gm		
Salmonella (MPN)	SM-9221E TMEC	< 0.3	org/4gm		
Foreign Matter	TMECC 03.08A	0.00	%		

Analysis conforms to SW-846

□ Converted NPK Value

The report gives:

• Total Nitrogen (N): 2.43%

• Total Phosphorus (P): 15,480 mg/kg = 1.548%

• Total Potassium (K): 14,720 mg/kg = 1.472%

Rounded to typical label format, this compost has an approximate:



NPK: 2-3.5-1.8

Y What This Compost Is Good For

This compost is well-balanced:

- Moderate nitrogen for leafy growth
- Good phosphorus for root development and flower/fruit production
- Modest potassium for overall plant health and disease resistance

Best Uses:

- General garden soil amendment: Boosts organic matter, structure, and fertility.
- Vegetable gardens: Especially great for early-season crops (lettuce, kale, spinach) and root veggies (carrots, beets).
- Flower beds: Encourages strong blooms and root growth.
- Tree and shrub planting: Improves establishment and growth.
- Topdressing lawns: Use lightly for soil health without burning grass.

Recommendations:

- Mix in, don't layer: Incorporate into soil at ~1–2 inches depth.
- Use at planting time or as a mid-season boost.

• **Supplement** with other fertilizers if you're targeting high-demand crops like tomatoes or corn.

Micronutrients:

These are present in trace amounts but are crucial for plant metabolism:

Element	Amount	Role in Plants
Boron (B)	104 mg/kg	Cell wall strength, flower/fruit development
Copper (Cu)	11 mg/kg	Enzyme activation, lignin synthesis
Zinc (Zn)	48 mg/kg	Hormone production, enzyme function
Iron (Fe)	Not reported	Commonly present; essential for chlorophyll
Manganese (Mn)	Not reported	Usually present in composts too
Nickel (Ni)	2.1 mg/kg	Needed in trace amounts for N metabolism
Selenium (Se)	0.86 mg/kg	Not essential for all plants, but beneficial in trace amounts
Arsenic, Cadmium, Lead, Mercury	All very low or non-detectable — ✓ safe levels	

Crop Benefits by Micronutrient

Crop Type	Boron (B) 🌸	Copper (Cu)	Zinc (Zn) 🧲	Nickel (Ni) ◆	Selenium (Se) ∤
Brassicas (broccoli, cabbage, kale)	Critical for head formation, flowering	Needed for enzyme function	For leaf size & health	Helps nitrogen metabolism	_
Root crops (carrots, beets, turnips)	Essential for root tip growth	Supports lignin formation	✓ Boosts size/yield	Helps nitrate use	_
Tomatoes & peppers	✓ Improves fruit set	✓ Prevents dieback, disease	For fruit sizing, disease resistance	Helps nutrient processing	_

Fruit trees (apples, peaches, etc.)	Prevents corking in apples	Enhances wood strength, leaf health	Needed for bud formation	Supports nitrogen utilization	_
Corn & grains	May prevent deformities	Assists in pollen production	Essential for growth hormones	✓ Improves yield	→ Beneficial for soil microbes
Legumes (beans, peas)	Improves nodulation & flowering	✓ Aids seed formation	✓ Prevents stunting	Required for symbiotic nitrogen fixation	_
Leafy greens (lettuce, spinach)	Prevents leaf burn, supports growth	✓ Minor but useful	Enhances green coloration	⚠ Supports N uptake	May benefit antioxidant levels

V Notes:

- **V** = Especially beneficial
- 🛕 = Helpful, but less critical
- 💝 = Not essential for all plants, but provides unique benefits or supports beneficial microbes