

### BIOCHAR 'TOTALS' ANALYSIS REPORT

1 sample supplied by The Trustee for the Barrows Business Trust on the 23 November 2022. Lab Job No. N4896.  
 Analysis requested by Trevor Barrows. **Your Job: CharmanBiochar-2.**

8 Simone Street KILMORE VIC 3764

		Product Name: Product Type: Manufacturing Site: Manufactured Date: Test Applicable:	Sample 1 CharmanBiochar-2 Biochar Charman .. SS-PACK-111
Parameter	Method Reference	N4896/1	
Moisture Content (%)	**Inhouse S2 (105°C)	22.3	
Volatile Matter (%)	Inhouse 750°C	95.0	
Ash Content (% ash)		4.99	
pH	Rayment & Lyons 2011 - 4A1 (1:10 Water)	8.59	
Electrical Conductivity (dS/m)	Rayment & Lyons 2011 - 3A1 (1:10 Water)	4.39	
Total Sulfur (%S)	Rayment & Lyons 2011 - 17C1 Aqua Regia	0.02	
Total Organic Carbon (%)	LECO Trumac Analyser - Inhouse S15b	84.6	
Total Carbon (%)	Inhouse S4a (LECO Trumac Analyser)	84.6	
Total Nitrogen (%)		0.36	
Organic Carbon/Nitrogen Ratio	**Calculation - Total Organic Carbon/Total Nitrogen	232	
Acid Neutralising Capacity (% CaCO <sub>3</sub> )	AS4454:2012 Appendix H	4.16	
<b>METALS</b>			
Total Calcium (%)		0.44	
Total Magnesium (%)		0.08	
Total Potassium (%)	Rayment & Lyons 2011 - 17C1 Aqua Regia	2.34	
Total Sodium (%)		0.02	
Total Sulphur (%)		0.02	
Total Phosphorus (%)	Rayment & Lyons 2011 - 17C1 Aqua Regia	0.14	
Total Zinc (mg/kg)		11.6	
Total Manganese (mg/kg)		18.0	
Total Iron (mg/kg)		394	
Total Copper (mg/kg)		9.61	
Total Boron (mg/kg)		14.0	
Silicon (mg/kg)		295	
Total Aluminium (mg/kg)		203	
Total Molybdenum (mg/kg)		<1	
Total Cobalt (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia	<1	
Total Selenium (mg/kg)		<1	
Total Cadmium (mg/kg)		<0.5	
Total Lead (mg/kg)		<1	
Total Arsenic (mg/kg)		<2	
Total Chromium (mg/kg)		6.89	
Total Nickel (mg/kg)		1.72	
Total Mercury (mg/kg)		<0.1	
Total Silver (mg/kg)		<1	

\* < LOR Less than limit of reporting. ND Not detected. NA Not applicable. NR Not required.

**Notes:**

- All analysis is dry weight – Samples reported on an oven dried basis at 105°C (testing conducted on finely ground sample dried at 40°C).
- Methods from Rayment and Lyons, 2011. *Soil Chemical Methods - Australasia*. CSIRO Publishing: Collingwood.
- Total Acid Extractable Nutrients indicate a store of nutrients.
- Conversions for 1 mg/kg = 1 ppm; 1 % = 10,000 ppm
- Testing completed in a NATA accredited laboratory.
- Analysis conducted between sample arrival date and reporting date.
- This report is not to be reproduced except in full. Results only relate to the item tested.
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- This report was issued on 02/12/2022.

Quality Checked: Brian Smith  
 Compost & Landscape Soils Co-ordinator