

COMPOST 'TOTALS' ANALYSIS REPORT

1 sample supplied by JR Richards & Sons Pty Ltd on the 10 August 2023. Lab Job No. P4017.

Analysis requested by Indika Kelasekara. **Your Job: Irrigation Area - Molong ORF.**

15-19 Brickworks Lane SOUTH GRAFTON NSW 2461

		Product Name:	Sample 1	Guideline
		Product Type:	Soil Sample - Irrigation Area - Molong ORF	AS4454:2012 Composted Product
		Manufacturing Site:	Fine Mulch <16mm	
		Manufactured Date:	JR Richards	
		Test Applicable:	4/07/2023 CA-PACK-001	
Parameter	Method Reference	P4017/1		
Moisture Content (%)	**Inhouse S2 (105°C)	18	> 25	
pH	Rayment & Lyons 2011 - 4A1 (1:5 Water)	6.20	> 5	
Electrical Conductivity (dS/m)	Rayment & Lyons 2011 - 3A1 (1:5 Water)	0.08	< 10	
Chloride (mg/kg)	**Rayment & Lyons 2011 - 5A3a	17.6	..	
Total Carbon (%)	Inhouse S4a (LECO Trumac Analyser)	2.23	≥ 20	
Total Nitrogen (%)	**Calculation - Total Carbon/Total Nitrogen	0.16	≥ 0.8	
Carbon/Nitrogen Ratio	**Calculation - Total Carbon x 1.7	13.7	..	
Estimated Organic Matter (% OM)		3.79	..	
Total Calcium (%)		0.17	..	
Total Magnesium (%)		0.10	..	
Total Potassium (%)	Rayment & Lyons 2011 - 17C1 Aqua Regia Total Salts	0.24	..	
Total Sodium (%)		<0.01	< 1 Na	
Total Sulphur (%)		0.02	..	
Total Phosphorus (%)	Rayment & Lyons 2011 - 17C1 Aqua Regia	0.05	≤ 0.1 P	
Total Zinc (mg/kg)		48.9	< 300 Zn	
Total Manganese (mg/kg)		3,125	..	
Total Iron (mg/kg)		44,232	..	
Total Copper (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia Total Metals	42.2	< 150 Cu	
Total Boron (mg/kg)		<5	< 100 B	
Total Silicon (mg/kg)		682	..	
Total Aluminium (mg/kg)		25,133	..	
Total Molybdenum (mg/kg)		1.08	..	
Total Cobalt (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia Total Metals	23.6	..	
Total Selenium (mg/kg)		1.16	< 5 Se	
Nitrogen/Sulphur Ratio	**Calculation - Total Nitrogen/Total Sulfur	8.25	..	
Nitrogen/Phosphorus Ratio	**Calculation - Total Nitrogen/Total Phosphorus	3.25	..	
Nitrogen/Potassium Ratio	**Calculation - Total Nitrogen/Total Potassium	0.68	..	
Phosphorus Sorption (mg P/kg)	**Inhouse S18b (Based on Abbott 1985)		..	
Nitrate Nitrogen (mg/kg N)	**Inhouse S37 (KCl)	4.09	..	
Ammonium Nitrogen (mg/kg N)		62.3	..	

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.
- Indicative guidelines are based on those in AS4454:2012 for a composted product.
- Total Acid Extractable Nutrients indicate a store of nutrients.
- Conversions for 1 mg/kg = 1 ppm; 1 % = 10,000 ppm
- Conversions to kg/ha = mg/kg x 2.24
- The chloride calculation of Cl mg/L = EC x 640 is considered an estimate, and most likely an over-estimate
- < LOR Less than limit of reporting. ND Not detected. NA Not applicable. NR Not required.
- 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.
- All services undertaken by EAL are covered by the EAL Laboratory Services Terms and Conditions (refer SCU.edu.au/eal/t&cs or on request).
- This report was issued on 23/08/2023.

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