## **Environmental** Analysis Laboratory

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## **COMPOST 'TOTALS' ANALYSIS REPORT**

1 sample supplied by JR Richards & Sons Pty Ltd on the 14 September 2023. Lab Job No. P5282. Analysis requested by Indika Kelasekara**. Your Job: Irrigation Area - DROPP**.

15-19 Brickworks Lane SOUTH GRAFTON NSW 2461

Product Name: Product Type: Manufacturing Site: Manufactured Date: Test Applicable:		Sample 1 Soils Sample- Irrigation area- DROPP Compost JR Richards & Sons 11/09/2023 CA-PACK-001	<b>Guideline</b> AS4454:2012 Composted Product
Parameter	Method Reference	P5282/1	
Moisture Content (%)	**Inhouse S2 (105°C)	44	> 25
рН	Rayment & Lyons 2011 - 4A1 (1:5 Water)	8.96	> 5
Electrical Conductivity (dS/m)	Rayment & Lyons 2011 - 3A1 (1:5 Water)	3.46	< 10
Chloride (mg/kg)	**Rayment & Lyons 2011 - 5A3a	2,844	
Total Carbon (%)	Inhouse S4a (LECO Trumac Analyser)	16.9	≥ 20
Total Nitrogen (%)		1.47	≥ 0.8
Carbon/Nitrogen Ratio	**Calculation - Total Carbon/Total Nitrogen	11.5	
Estimated Organic Matter (% OM)	**Calculation - Total Carbon x 1.7	28.7	
Total Calcium (%)		1.87	
Total Magnesium (%)		0.47	
Total Potassium (%)	Rayment & Lyons 2011 - 17C1 Aqua Regia Total Salts	1.13	
Total Sodium (%)		0.16	< 1 Na
Total Sulphur (%)		0.16	
Total Phosphorus (%)	Rayment & Lyons 2011 - 17C1 Aqua Regia	0.33	≤ 0.1 P
Total Zinc (mg/kg)		138	< 300 Zn
Total Manganese (mg/kg)		253	
Total Iron (mg/kg)		15,963	
Total Copper (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia Total Metals	34.3	< 150 Cu
Total Boron (mg/kg)		24.7	< 100 B
Total Silicon (mg/kg)		1,808	
Total Aluminium (mg/kg)		6,617	
Total Molybdenum (mg/kg)		1.15	
Total Cobalt (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia Total Metals	7.50	
Total Selenium (mg/kg)		<1	< 5 Se
Nitrogen/Sulphur Ratio	**Calculation - Total Nitrogen/Total Sulfur	9.14	
Nitrogen/Phosphorus Ratio	**Calculation - Total Nitrogen/Total Phosphorus	4.41	
Nitrogen/Potassium Ratio	**Calculation - Total Nitrogen/Total Potassium	1.30	
Phosphorus Buffer Index	**Rayment & Lyons 2011 - 9l4b (PBI)	200	
Nitrate Nitrogen (mg/kg N)	**Inhouse S37 (KCI)	397	

## Notes:

1. 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).

2. Methods from Rayment and Lyons, 2011. Soil Chemical Methods - Australasia.CSIRO Publishing: Collingwood.

3. Indicative guidelines are based on those in AS4454:2012 for a composted product.

4. Total Acid Extractable Nutrients indicate a store of nutrients.

5. Conversions for 1 mg/kg = 1 ppm; 1 % = 10,000 ppm

6. Conversions to kg/ha = mg/kg x 2.24

7. The chloride calculation of Cl mg/L = EC x 640 is considered an estimate, and most likely an over-estimate

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

9. Testing completed in a NATA accredited laboratory.

10. Analysis conducted between sample arrival date and reporting date.

11. This report is not to be reproduced except in full. Results only relate to the item tested.

12. 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).

13. This report was issued on 10/10/2023.

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



