

## **Southern Cross University**

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

1 sample supplied by JR Richards & Sons Pty Ltd on the 2 May 2024. Lab Job No. R3765. Analysis requested by Phil Hay. Your Job: Mol Irrigation 2024.

15 Brickworks Lane SOUTH GRAFTON NSW 2460

Product Name: Product Type: Manufacturing Site: Manufactured Date: Test Applicable:		Sample 1  Mo Irrigation 2024  Soil  JRRS  2/05/2024  CA-PACK-001	Guideline  AS4454:2012  Composted Product
Parameter	Method Reference	R3765/1	
Moisture Content (%)	**Inhouse S2 (105°C)	15	> 25
рН	Rayment & Lyons 2011 - 4A1 (1:5 Water)	6.48	> 5
Electrical Conductivity (dS/m)	Rayment & Lyons 2011 - 3A1 (1:5 Water)	0.06	< 10
Chloride (mg/kg)	**Rayment & Lyons 2011 - 5A3a	18	
Total Carbon (%)	Inhouse S4a (LECO Trumac Analyser)	3.3	≥ 20
Total Nitrogen (%)		0.33	≥ 0.8
Carbon/Nitrogen Ratio	**Calculation - Total Carbon/Total Nitrogen	10	
Estimated Organic Matter (% OM)	**Calculation - Total Carbon x 1.7	5.6	
Total Calcium (%)		0.25	
Total Magnesium (%)		0.12	
Total Potassium (%)	Rayment & Lyons 2011 - 17C1 Aqua Regia Total Salts	0.32	
Total Sodium (%)		<0.01	< 1 Na
Total Sulphur (%)		0.03	
Total Phosphorus (%)	Rayment & Lyons 2011 - 17C1 Aqua Regia	0.06	≤ 0.1 P
Total Zinc (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia Total Metals	54.4	< 300 Zn
Total Manganese (mg/kg)		3,655	
Total Iron (mg/kg)		45,862	
Total Copper (mg/kg)		45.7	< 150 Cu
Total Boron (mg/kg)		6.74	< 100 B
Total Silicon (mg/kg)		1,269	
Total Aluminium (mg/kg)		25,160	
Total Molybdenum (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia Total Metals	1.12	
Total Cobalt (mg/kg)		22.8	
Total Selenium (mg/kg)		<1	< 5 Se
Nitrogen/Sulphur Ratio	**Calculation - Total Nitrogen/Total Sulfur	12.6	
Nitrogen/Phosphorus Ratio	**Calculation - Total Nitrogen/Total Phosphorus	5.4	
Nitrogen/Potassium Ratio	**Calculation - Total Nitrogen/Total Potassium	1.1	
Nitrate Nitrogen (mg/kg N)	**Inhouse S37 (KCI)	9.9	

## 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 CI  $mg/L = EC \times 640$  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 20/05/2024.

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





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