

DŴR CYMRU - WELSH WATER

Bontgoch cake

Analysis of Water Treatment Works Sludge

10/10/2018

Application rate (t/ha)	54	Lab ref. 30517
Application rate (t/acre)	21.6	
pH	5.4	
Dry solids (%)	20.7	
Organic matter content (%)	38.40	

NUTRIENT CONTENT

TOTALS	result	units	Total		Available	
			(kg/tonne)	(kg/ha)	(kg/tonne)	(kg/ha)
Nitrogen (N)	1.45	%	3.00	162.08	0.067	3.6
Ammonium-N	322	mg/kg	0.07	3.60		
Phosphorus (P)	5421	mg/kg	1.12			
Phosphate (P ₂ O ₅)			2.57	138.8	0.514	27.8
Potassium (K)	232	mg/kg	0.05			
Potash (K ₂ O)			0.06	3.1	0.012	0.6
Magnesium (Mg)	519	mg/kg	0.11			
Magnesium (MgO)			0.18	9.6	0.036	1.9
Sulphur (S)	4808	mg/kg	1.00			
Sulphur (SO ₃)			2.49	134.4	0.249	13.4

POTENTIALLY TOXIC ELEMENTS

TOTALS	result	units	Rate		Limit
			(kg/tonne)	(kg/ha)	(kg/ha/yr)
Zinc	412	mg/kg	0.09	4.61	15.00
Copper	33	mg/kg	0.01	0.37	7.50
Nickel	52.80	mg/kg	0.01	0.59	3.00
Lead	73.50	mg/kg	0.02	0.82	15.00
Cadmium	1.54	mg/kg	0.00	0.02	0.15
Chromium	27.6	mg/kg	0.01	0.31	15.00
Arsenic	62.6	mg/kg	0.01	0.700	0.70
Mercury	0.1	mg/kg	0.00	0.00	0.10
Other Elements					
Aluminium	6537	mg/kg	1.35	73	
Iron	371638	mg/kg	76.93	4154	

To convert from kg/tonne to units/ton multiply by 2

To convert from kg/ha to units/acre multiply by 0.8