DŴR CYMRU - WELSH WATER

Cwellyn

Analysis of Water Treatment Works Sludge

Date: 02 May 2018

Application rate (t/ha)	**250**	Lab ref. S 4168861
Application rate (t/acre)	**100.0**	
pH	**6.8**	
Dry solids (%)	**3.7**	
Organic matter content (%)	**45.40**	

NUTRIENT CONTENT

			Total		Available	
TOTALS	**result**	**units**	**(kg/tonne)**	**(kg/ha)**	**(kg/tonne)**	**(kg/ha)**
Nitrogen (N)	1.17	%	0.44	109.10	0.020	4.9
Ammonium-N	526	mg/kg	0.02	4.90		
Phosphorus (P)	736	mg/kg	0.03			
Phosphate (P_2O_5)			0.06	16	0.013	3.1
Potassium (K)	128	mg/kg	0.00			
Potash (K_2O)			0.01	1	0.001	0.3
Magnesium (Mg)	515	mg/kg	0.02			
Magnesium (MgO)			0.03	8	0.006	1.6
Sulphur (S)	8720	mg/kg	0.33			
Sulphur (SO_3)			0.81	203	0.081	20.3

POTENTIALLY TOXIC ELEMENTS

			Rate		Limit
TOTALS	**result**	**units**	**(kg/tonne)**	**(kg/ha)**	**(kg/ha/yr)**
Zinc	192	mg/kg	0.01	1.79	15.00
Copper	65.5	mg/kg	0.00	0.61	7.50
Nickel	19.60	mg/kg	0.00	0.18	3.00
Lead	6.20	mg/kg	0.00	0.06	15.00
Cadmium	0.38	mg/kg	0.00	0.00	0.15
Chromium	4.3	mg/kg	0.00	0.04	15.00
Arsenic	27.8	mg/kg	0.00	0.26	0.70
Mercury	0.54	mg/kg	0.00	0.01	0.10
Other Elements					
Aluminium	3E+05	mg/kg	11.50	2874	
Iron	7870	mg/kg	0.29	73	

To convert from kg/tonne to units/ton multiply by 2
To convert from kg/ha to units/acre multiply by 0.8