DŴR CYMRU - WELSH WATER

Alwen

Analysis of Water Treatment Works Sludge

Date: 02 May 2018

Application rate (t/ha)	**194**	Lab ref.	4168867
Application rate (t/acre)	**77.6**		
pH	**4.7**		
Dry solids (%)	**13.4**		
Organic matter content (%)			

NUTRIENT CONTENT

			Total		Available	
TOTALS	**result**	**units**	**(kg/tonne)**	**(kg/ha)**	**(kg/tonne)**	**(kg/ha)**
Nitrogen (N)	0.961	%	1.29	249.82	0.019	3.8
Ammonium-N	145	mg/kg	0.02	3.77		
Phosphorus (P)	346	mg/kg	0.05			
Phosphate (P_2O_5)			0.11	21	0.021	4.1
Potassium (K)	87	mg/kg	0.01			
Potash (K_2O)			0.01	3	0.003	0.5
Magnesium (Mg)	155	mg/kg	0.02			
Magnesium (MgO)			0.03	7	0.007	1.3
Sulphur (S)	6520	mg/kg	0.87			
Sulphur (SO_3)			2.18	424	0.218	42.4

POTENTIALLY TOXIC ELEMENTS

			Rate		Limit
TOTALS	**result**	**units**	**(kg/tonne)**	**(kg/ha)**	**(kg/ha/yr)**
Zinc	68.3	mg/kg	0.01	1.78	15.00
Copper	7.8	mg/kg	0.00	0.20	7.50
Nickel	6.00	mg/kg	0.00	0.16	3.00
Lead	8.40	mg/kg	0.00	0.22	15.00
Cadmium	0.11	mg/kg	0.00	0.00	0.15
Chromium	13.2	mg/kg	0.00	0.34	15.00
Arsenic	8.2	mg/kg	0.00	0.21	0.70
Mercury	0.38	mg/kg	0.00	0.01	0.10
Other Elements					
Aluminium	2660	mg/kg	0.36	69	
Iron	#####	mg/kg	49.04	9515	

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