DŴR CYMRU - WELSH WATER

Cefni

Analysis of Water Treatment Works Sludge

Date: 11 May 2018

Application rate (t/ha)	**250**	Lab ref. S 4168871
Application rate (t/acre)	**100.0**	
pH	**6.8**	
Dry solids (%)	**4.6**	
Organic matter content (%)	**47.90**	

NUTRIENT CONTENT

			Total		Available	
TOTALS	**result**	**units**	**(kg/tonne)**	**(kg/ha)**	**(kg/tonne)**	**(kg/ha)**
Nitrogen (N)	1.63	%	0.75	188.27	0.024	6.0
Ammonium-N	522	mg/kg	0.02	6.03		
Phosphorus (P)	1990	mg/kg	0.09			
Phosphate (P_2O_5)			0.21	53	0.042	10.5
Potassium (K)	391	mg/kg	0.02			
Potash (K_2O)			0.02	5	0.004	1.1
Magnesium (Mg)	813	mg/kg	0.04			
Magnesium (MgO)			0.06	16	0.012	3.1
Sulphur (S)	11300	mg/kg	0.52			
Sulphur (SO_3)			1.31	326	0.131	32.6

POTENTIALLY TOXIC ELEMENTS

			Rate		Limit
TOTALS	**result**	**units**	**(kg/tonne)**	**(kg/ha)**	**(kg/ha/yr)**
Zinc	39.8	mg/kg	0.00	0.46	15.00
Copper	30.9	mg/kg	0.00	0.36	7.50
Nickel	21.60	mg/kg	0.00	0.25	3.00
Lead	6.20	mg/kg	0.00	0.07	15.00
Cadmium	0.11	mg/kg	0.00	0.00	0.15
Chromium	6.1	mg/kg	0.00	0.07	15.00
Arsenic	9.1	mg/kg	0.00	0.11	0.70
Mercury	0.44	mg/kg	0.00	0.01	0.10
Other Elements					
Aluminium	1E+05	mg/kg	5.12	1281	
Iron	8340	mg/kg	0.39	96	

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