

# DŴR CYMRU - WELSH WATER

## Crai SL

### Analysis of Water Treatment Works Sludge

14/01/2019

39262

Application rate (t/ha)	87
Application rate (t/acre)	34.8
pH	4.8
Dry solids (%)	15.7
Organic matter content (%)	39.00

### NUTRIENT CONTENT

TOTALS	result	units	Total		Available	
			(kg/tonne)	( kg/ha)	(kg/tonne)	( kg/ha)
Nitrogen (N)	1.13	%	1.77	154.35	0.002	0.1
Ammonium-N	10	mg/kg	0.00	0.14		
Phosphorus (P)	1310	mg/kg	0.21			
Phosphate (P <sub>2</sub> O <sub>5</sub> )			0.47	41.0	0.094	8.2
Potassium (K)	219	mg/kg	0.03			
Potash (K <sub>2</sub> O)			0.04	3.6	0.008	0.7
Magnesium (Mg)	305	mg/kg	0.05			
Magnesium (MgO)			0.08	6.9	0.016	1.4
Sulphur (S)	5583	mg/kg	0.88			
Sulphur (SO <sub>3</sub> )			2.19	190.6	0.219	19.1

### POTENTIALLY TOXIC ELEMENTS

TOTALS	result	units	Rate		Limit
			(kg/tonne)	( kg/ha)	(kg/ha/yr)
Zinc	81.1	mg/kg	0.01	1.11	15.00
Copper	39.3	mg/kg	0.01	0.54	7.50
Nickel	21.70	mg/kg	0.00	0.30	3.00
Lead	11.30	mg/kg	0.00	0.15	15.00
Cadmium	0.59	mg/kg	0.00	0.01	0.15
Chromium	33.3	mg/kg	0.01	0.45	15.00
Arsenic	50.8	mg/kg	0.01	0.694	0.70
Mercury	0.12	mg/kg	0.00	0.00	0.10
Other Elements					
Aluminium	2634	mg/kg	0.41	36	
Iron	332441	mg/kg	52.19	4541	

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

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