



	Results	WHO Drinking Water limits	Limits Exceeded (Y/N)
Sample_ID	S1		
Sampling date	19.06.2019		
Location ID	Birtley WWTP		
Sample description	CSO in Rowletch Burn		
Sample Source	Surface water		
Label	SW		
Latitude	54.89429		
Longitude	-1.5874		
Sea Level (mAOD)			
Depth below ground (m)			
pH	8.65		
Temp (degC)			
Salinity (ppm)	511		
TDS (mg/l)	231		
Conductivity (uS)	1040		
Alkalinity (mg/L CaCO3)	156		
Faecal Coliforms (count/100ml)	42800	0	Y
Aluminium (mg/l)	0.016	0.2	N

Ammonium (mg/l)	27.005	<i>Not of health concerns at levels found in drinking water</i>	N
Antimony (mg/l)	0.008	0.02	N
Arsenic (mg/l)	0.001	0.01	N
Barium (mg/l)	0.075	1.3	N
Bromide (mg/l)		6	N
Cadmium (mg/l)	0.000	0.003	N
Calcium (mg/l)	96.517	100-300	N
Chloride (mg/l)	141.197	250	N
Chromium (mg/l)	0.000	0.05	N
Copper (mg/l)	0.004	2	N
Fluoride (mg/l)	0.427	1.5	N
Iron (mg/l)	0.034	2	N
Lead (mg/l)	0.000	0.01	N
Magnesium (mg/l)	22.370	<i>Not of health concerns at levels found in drinking water</i>	N
Manganese (mg/l)	0.187	0.4	N
Nickel (mg/l)	0.003	0.07	N
Nitrate (mg/l) (HACH)	9.207	50	N
Nitrate.1 (mg/l) (Ion Chrom)	12.487	50	N
Nitrite (mg/l) (HACH)	0.355	3	N
Nitrite.1 (mg/l) (Ion Chrom)	1.344	3	N
Phosphate (mg/l)	0.566	<i>Not of health concerns at levels found in drinking water</i>	N
Potassium (mg/l)	12.401	<i>Not of health concerns at levels found in drinking water</i>	N
Silicon (mg/l)		<i>Not of health concerns at levels found in drinking water</i>	N
Sodium (mg/l)	92.587	200	N
Strontium (mg/l)	0.407	4	N

Sulphate (mg/l)	119.237	500	N
Zinc (mg/l)	0.078	<i>Not of health concerns at levels found in drinking water</i>	N
TOC (mg/l)	33.480		
TIC (mg/l)	38.920		
UV abs 200 (cm-1)	1.911		
UV abs 210 (cm-1)	1.451		
UV abs 220 (cm-1)	0.774		
UV abs 230 (cm-1)	0.348		
UV abs 254 (cm-1)	0.170		
UV abs 260 (cm-1)	0.148		
UV abs 280 (cm-1)	0.106		
UV abs 300 (cm-1)	0.074		
Total Coliforms (total count)	47200		
Putative Pathogens - Human E.coli (total count)			
Putative Pathogens - Total E.coli (total count)			
Putative Pathogens - Total Coliform (total count)			
Total Bacteria (total count)			
Enterococci (count/100ml)	4600		
Contaminants	High faecal coliform count;		
Health Effects	Faecal contamination can lead to vomiting and diarrhoea. Pathogens such as E coli, hepatitis and salmonella can cause severe health effects ;		

Treatments	Faecal treatment - Heat water to a rolling boil and then allow to cool naturally, chemical disinfection, coagulation, distillation, reverse osmosis, slow sand filtration or solar disinfection;		
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