



	Results	WHO Drinking Water limits	Limits Exceeded (Y/N)
Sample_ID	S2		
Sampling date	19.06.2019		
Location ID	Birtley WWTP		
Sample description	Upstream of Rowletch Burn		
Sample Source	Surface water		
Label	SW		
Latitude	54.89195		
Longitude	-1.58414		
Sea Level (mAOD)			
Depth below ground (m)			
pH	7.72		
Temp (degC)			
Salinity (ppm)	276		
TDS (mg/l)	394		
Conductivity (uS)	570		
Alkalinity (mg/L CaCO3)	118		
Faecal Coliforms (count/100ml)	23700	0	Y
Aluminium (mg/l)	0.018	0.2	N

<b>Ammonium (mg/l)</b>	0.789	<i>Not of health concerns at levels found in drinking water</i>	N
<b>Antimony (mg/l)</b>	0.016	0.02	N
<b>Arsenic (mg/l)</b>	0.000	0.01	N
<b>Barium (mg/l)</b>	0.044	1.3	N
<b>Bromide (mg/l)</b>		6	N
<b>Cadmium (mg/l)</b>	0.000	0.003	N
<b>Calcium (mg/l)</b>	52.027	100-300	N
<b>Chloride (mg/l)</b>	68.712	250	N
<b>Chromium (mg/l)</b>	0.000	0.05	N
<b>Copper (mg/l)</b>	0.006	2	N
<b>Fluoride (mg/l)</b>	0.264	1.5	N
<b>Iron (mg/l)</b>	0.052	2	N
<b>Lead (mg/l)</b>	0.000	0.01	N
<b>Magnesium (mg/l)</b>	10.988	<i>Not of health concerns at levels found in drinking water</i>	N
<b>Manganese (mg/l)</b>	0.000	0.4	N
<b>Nickel (mg/l)</b>	0.002	0.07	N
<b>Nitrate (mg/l) (HACH)</b>	7.392	50	N
<b>Nitrate.1 (mg/l) (Ion Chrom)</b>	7.670	50	N
<b>Nitrite (mg/l) (HACH)</b>	0.361	3	N
<b>Nitrite.1 (mg/l) (Ion Chrom)</b>	0.912	3	N
<b>Phosphate (mg/l)</b>	0.787	<i>Not of health concerns at levels found in drinking water</i>	N
<b>Potassium (mg/l)</b>	6.204	<i>Not of health concerns at levels found in drinking water</i>	N
<b>Silicon (mg/l)</b>		<i>Not of health concerns at levels found in drinking water</i>	N
<b>Sodium (mg/l)</b>	44.369	200	N
<b>Strontium (mg/l)</b>	0.198	4	N

<b>Sulphate (mg/l)</b>	20.625	500	N
<b>Zinc (mg/l)</b>	0.084	<i>Not of health concerns at levels found in drinking water</i>	N
<b>TOC (mg/l)</b>	47.630		
<b>TIC (mg/l)</b>	21.700		
<b>UV abs 200 (cm-1)</b>	1.513		
<b>UV abs 210 (cm-1)</b>	1.149		
<b>UV abs 220 (cm-1)</b>	0.660		
<b>UV abs 230 (cm-1)</b>	0.348		
<b>UV abs 254 (cm-1)</b>	0.194		
<b>UV abs 260 (cm-1)</b>	0.169		
<b>UV abs 280 (cm-1)</b>	0.123		
<b>UV abs 300 (cm-1)</b>	0.085		
<b>Total Coliforms (total count)</b>	47200		
<b>Putative Pathogens - Human E.coli (total count)</b>			
<b>Putative Pathogens - Total E.coli (total count)</b>			
<b>Putative Pathogens - Total Coliform (total count)</b>			
<b>Total Bacteria (total count)</b>			
<b>Enterococci (count/100ml)</b>	7800		
<b>Contaminants</b>	High faecal coliform count;		
<b>Health Effects</b>	Faecal contamination can lead to vomiting and diarrhoea. Pathogens such as E coli, hepatitis and salmonella can cause severe health effects ;		

<b>Treatments</b>	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;		
-------------------	--	--	--