

# 2017 WATER QUALITY REPORT



Zone Name : Shotton

Zone Reference : ZC01DC

Population : 160

| Parameter   | Units      | PCV Standard | No of Samples | PCV Breach | Min | Mean    | Max       |
|---|------------|--------------|---------------|------------|-----|---------|-----------|
| 1,2 Dichloroethane (Total)                                    | µg/l       | 3            | 4             | 0          | <   | 0.07    | < 0.07    |
| 2,3,6-Tba   | µg/l       | 0.1          | 4             | 0          | <   | 0.002   | < 0.004   |
| Aluminium (Total)   | µg/l Al    | 200          | 4             | 0          |     | 7.43    | 11.3325   |
| Ammonium (Total)  | mg/l NH4   | 0.5          | 4             | 0          | <   | 0.004   | < 0.004   |
| Antimony  | µg/l Sb    | 5            | 4             | 0          |     | 0.071   | 0.0885    |
| Arsenic (Total)   | µg/l As    | 10           | 4             | 0          |     | 0.19    | 0.2375    |
| Asulam  | µg/l       | 0.1          | 4             | 0          | <   | 0.002   | < 0.003   |
| Benazolin (Total)   | µg/l       | 0.1          | 4             | 0          | <   | 0.003   | < 0.0035  |
| Benzene (Total)   | µg/l       | 1            | 4             | 0          | <   | 0.02    | < 0.02    |
| Benzo[a]Pyrene (Total)  | µg/l       | 0.01         | 4             | 0          | <   | 0.00022 | < 0.00022 |
| Boron   | mg/l B     | 1            | 4             | 0          | <   | 0.00978 | 0.01375   |
| Bromate   | µg/l BrO3  | 10           | 4             | 0          | <   | 0.1     | < 0.1     |
| Cadmium (Total)   | µg/l Cd    | 5            | 4             | 0          |     | 0.008   | 0.01025   |
| Chloride  | mg/l Cl    | 250          | 4             | 0          |     | 17.7    | 23.75     |
| Chromium (Total)  | µg/l Cr    | 50           | 4             | 0          |     | 0.27    | 0.3175    |
| Clopyralid (Total)  | µg/l       | 0.1          | 4             | 0          | <   | 0.003   | 0.00575   |
| Clostridium Perfringens (Sulphite-reducing Clostridia) (Conf) | No./100ml  | 1            | 4             | 0          |     | 0       | 0         |
| Coliform Bacteria (Indicator)                                 | No./100ml  | 1            | 12            | 0          |     | 0       | 0         |
| Colony Counts After 3 Days At 22øc (Colony Counts)            | Count      | -            | 4             | 0          |     | 0       | 0         |
| Colony Counts After 48 Hours At 37øc (Colony Counts)          | Count      | -            | 4             | 0          |     | 0       | 0         |
| Colour  | mg/l Pt/Co | 20           | 4             | 0          | <   | 0.5     | 1.05      |
| Conductivity (Electrical Conductivity)                        | µS/cm @ 20 | 2500         | 4             | 0          |     | 205     | 243.25    |
| Copper (Total)  | mg/l Cu    | 2            | 4             | 0          |     | 0.0061  | 0.01998   |
| Cyanide (Total)   | µg/l CN    | 50           | 4             | 0          | <   | 0.7     | 0.725     |
| Diazinon (Total)  | µg/l       | 0.1          | 4             | 0          | <   | 0.001   | < 0.001   |
| E.Coli (faecal coliforms Confirmed)                           | No./100ml  | 1            | 12            | 0          |     | 0       | 0         |
| Enterococci (Confirmed)                                       | No./100ml  | 1            | 4             | 0          |     | 0       | 0         |
| Fluoride (Total)  | mg/l F     | 1.5          | 4             | 0          |     | 0.02    | 0.02      |
| Hydrogen ion (pH) - Indicator (Hydrogen ion) (pH)             | pH value   | 9.5          | 4             | 0          |     | 7.14    | 7.5725    |
| Iron (Total)  | µg/l Fe    | 200          | 4             | 0          |     | 23.4    | 29.775    |
| Lead (10)   | µg/l Pb    | 10           | 4             | 0          |     | 0.11    | 0.47      |
| Linuron (Total)   | µg/l       | 0.1          | 4             | 0          | <   | 0.003   | < 0.005   |
| Manganese (Total)   | µg/l Mn    | 50           | 4             | 0          |     | 1.58    | 3.3225    |
| MCPA (Total) 4-chloro-o-tolxyloxyacetic acid                  | µg/l       | 0.1          | 4             | 0          | <   | 0.004   | 0.00475   |
| MCPP(Mecoprop) (Total)  | µg/l       | 0.1          | 4             | 0          | <   | 0.002   | 0.0025    |
| Mercury (Total)   | µg/l Hg    | 1            | 4             | 0          | <   | 0.05    | < 0.05    |
| Nickel (Total)  | µg/l Ni    | 20           | 4             | 0          |     | 0.73    | 1.01      |
| Nitrate (Total)   | mg/l NO3   | 50           | 4             | 0          |     | 2.82    | 5.075     |
| Nitrite - Consumer's Taps                                     | mg/l NO2   | 0.5          | 4             | 0          | <   | 0.002   | < 0.002   |
| Nitrite/Nitrate formula                                       | mg/l       | 1            | 4             | 0          | <   | 0.37    | < 0.37    |
| Odour   | No.        | 0.9          | 4             | 0          |     | 0       | 0         |
| Pesticides (Total by Calculation)                             | µg/l       | 0.5          | 4             | 0          |     | 0.005   | 0.00825   |
| Polycyclic Aromatic Hydrocarbons (Total by Calculation)       | µg/l       | 0.1          | 4             | 0          |     | 0       | 0         |
| Residual Disinfectant - Total                                 | mg/l       | -            | 12            | 0          |     | 0.34    | 0.64417   |
| Selenium (Total)  | µg/l Se    | 10           | 4             | 0          |     | 0.37    | 0.61      |
| Sodium (Total)  | mg/l Na    | 200          | 4             | 0          |     | 17.4    | 23.725    |
| Sulphate  | mg/l SO4   | 250          | 4             | 0          |     | 50      | 57.3      |
| Taste (Taste Quant)   | No.        | 0.9          | 4             | 0          |     | 0       | 0         |
| Tetrachloromethane (Total)                                    | µg/l       | 3            | 4             | 0          | <   | 0.02    | < 0.02    |
| Total Organic Carbon  | mg/l C     | -            | 4             | 0          |     | 1.1     | 1.275     |
| Trichloroethene & Tetrachloroethene - Sum Of 2 Substances     | µg/l       | 10           | 4             | 0          |     | 0       | 0         |
| Trihalomethanes (Total by Calculation)                        | µg/l       | 100          | 4             | 0          |     | 34.41   | 43.3425   |
| Turbidity   | NTU        | -            | 4             | 0          |     | 0.13    | 0.22      |

Hardness Classification : MODERATELY SOFT

Calcium Carbonate (CaCO3) : 63 ppm

Degrees French : 6.3

Degrees Clark : 4.4

Degrees German : 3.5

## Commentary on Water Quality

All of the samples collected from this zone in 2017 complied with the Water Supply (Water Quality) Regulations 2010.

There were no Undertakings or Authorised Departures applied to this water supply zone during 2017.