# THAMES WATER UTILITIES
## WATER QUALITY REPORT - 2014 DATA

**Water Supply Zone:** LV 2 GOFFS OAK **Zone No.:** 125

**Population:** 25681

**Time Period: 01/01/2014 to 31/12/2014**
**Date extracted: 10/04/2015**

| | | | Concentration or Value (all samples) | | | No. of Samples | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Units** | **PCV** | **Min.** | **Mean** | **Max.** | **Total** | **Contra-vening** | **% of samples contravening PCV** |
| Coliform bacteria | no./100ml | 0 | 0 | 0 | 0 | 72 | 0 | 0 |
| *E. coli* | no./100ml | 0 | 0 | 0 | 0 | 72 | 0 | 0 |
| *Enterococci* | no./100ml | 0 | 0 | 0 | 0 | 8 | 0 | 0 |
| *Clostridium perfringens* | no./100ml | 0 | 0 | 0 | 0 | 461 | 0 | 0 |
| Colony count 22°C | cfu/ml | - | 0 | 1.292 | 9 | 24 | 0 | 0 |
| Colony count 37°C | cfu/ml | - | 0 | 1.958 | 12 | 24 | 0 | 0 |
| Residual Disinfectant | mg/l | - | 0.07 | 0.312 | 0.69 | 72 | 0 | 0 |
| Colour (Pt/Co scale) | mg/lPt/Co | 20 | <0.800 | 1.008 | 2.1 | 24 | 0 | 0 |
| Hydrogen Ion | pH | 6.50-9.50 | 7.1 | 7.538 | 7.8 | 24 | 0 | 0 |
| Turbidity | FTU | 4 | 0.04 | 0.083 | 0.15 | 24 | 0 | 0 |
| Conductivity at 20°C | uS/cm | 2500 | 595 | 629.875 | 672 | 24 | 0 | 0 |
| Ammonium as NH4 | mg/l | 0.5 | <0.030 | 0.067 | 0.16 | 24 | 0 | 0 |
| Chloride as Cl | mg/l | 250 | 44.08 | 49.474 | 58.52 | 8 | 0 | 0 |
| Sodium as Na | mg/l | 200 | 29.4 | 33.3 | 37.9 | 8 | 0 | 0 |
| Sulphate as SO4 | mg/l | 250 | 50.5 | 65.2 | 97.8 | 8 | 0 | 0 |
| Nitrate as NO3 | mg/l | 50 | 9.2 | 20.579 | 32.1 | 24 | 0 | 0 |
| Nitrite as NO2 | mg/l | 0.5 | 0.01 | 0.107 | 0.24 | 24 | 0 | 0 |
| Nitrate/Nitrite calculation | mg/l | 1 | 0.22 | 0.447 | 0.66 | 24 | 0 | 0 |
| Total Organic Carbon as C | mg/l | - | 1.5 | 2.004 | 3.1 | 49 | 0 | 0 |
| Total Hardness as CaCO3 | mg/l | N/A | 280 | 281 | 281 | 2 | 0 | 0 |
| Odour (quantatative) | dilution no. | 0 | 0 | 0 | 0 | 12 | 0 | 0 |
| Taste (quantatative) | dilution no. | 0 | 0 | 0 | 0 | 12 | 0 | 0 |
| Iron as Fe | ug/l | 200 | <2.000 | 5.004 | 10.4 | 24 | 0 | 0 |
| Manganese as Mn | ug/l | 50 | <0.200 | <0.750 | <0.800 | 24 | 0 | 0 |
| Aluminium as Al | ug/l | 200 | <1.400 | 6.967 | 18.7 | 24 | 0 | 0 |
| Antimony as Sb | ug/l | 5 | <0.500 | <0.763 | <0.800 | 8 | 0 | 0 |
| Arsenic as As | ug/l | 10 | 0.6 | 0.975 | 1.3 | 8 | 0 | 0 |
| Cadmium as Cd | ug/l | 5 | <0.100 | <0.113 | <0.200 | 8 | 0 | 0 |
| Chromium as Cr | ug/l | 50 | <0.900 | <0.938 | <1.200 | 8 | 0 | 0 |
| Copper as Cu | mg/l | 2 | <0.004 | 0.054 | 0.204 | 8 | 0 | 0 |
| Lead as Pb | ug/l | 10 | <0.200 | 0.938 | 2.7 | 8 | 0 | 0 |
| Mercury as Hg | ug/l | 1 | <0.040 | <0.087 | <0.090 | 48 | 0 | 0 |
| Nickel as Ni | ug/l | 20 | <1.300 | 2.025 | 4.5 | 8 | 0 | 0 |
| Fluoride as F | mg/l | 1.5 | 0.158 | 0.223 | 0.415 | 9 | 0 | 0 |
| Selenium as Se | ug/l | 10 | <0.800 | 0.975 | 1.4 | 8 | 0 | 0 |
| Boron as B | mg/l | 1 | 0.068 | 0.074 | 0.08 | 8 | 0 | 0 |
| Bromate as BrO3 | ug/l | 10 | <0.700 | 1.467 | 3.4 | 48 | 0 | 0 |
| Cyanide as CN | ug/l | 50 | <0.700 | 0.702 | 0.8 | 49 | 0 | 0 |
| PAHs (Sum of 4 substances) | ug/l | 0.1 | 0 | 0 | 0.001 | 8 | 0 | 0 |
| Benzo (a) pyrene | ug/l | 0.01 | <0.001 | <0.001 | <0.001 | 8 | 0 | 0 |
| Trihalomethanes | ug/l | 100 | 12.4 | 16.8 | 20.1 | 9 | 0 | 0 |
| Tetra- & Trichloroethene calc | ug/l | 10 | 0 | 0 | 0 | 8 | 0 | 0 |
| Tetrachloromethane | ug/l | 3 | <0.200 | <0.200 | <0.200 | 8 | 0 | 0 |
| 1,2 dichloroethane | ug/l | 3 | <0.200 | <0.263 | <0.300 | 8 | 0 | 0 |

NOTE: PCV = Prescribed Concentration or Value

# THAMES WATER UTILITIES
## WATER QUALITY REPORT - 2014 DATA

**Water Supply Zone:** LV 2 GOFFS OAK **Zone No.:** 125

**Population:** 25681

**Time Period: 01/01/2014 to 31/12/2014**
**Date extracted: 10/04/2015**

| | | | Concentration or Value (all samples) | | | No. of Samples | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Units** | **PCV** | **Min.** | **Mean** | **Max.** | **Total** | **Contra-vening** | **% of samples contravening PCV** |
| Benzene | ug/l | 1 | <0.100 | <0.100 | <0.100 | 8 | 0 | 0 |
| Atrazine | ug/l | 0.1 | <0.005 | 0.005 | 0.01 | 49 | 0 | 0 |
| Bentazone | ug/l | 0.1 | <0.005 | <0.005 | <0.005 | 48 | 0 | 0 |
| Bromoxynil | ug/l | 0.1 | <0.002 | <0.005 | <0.005 | 48 | 0 | 0 |
| Carbetamide | ug/l | 0.1 | <0.003 | 0.003 | 0.005 | 49 | 0 | 0 |
| Chlortoluron | ug/l | 0.1 | <0.003 | <0.003 | <0.003 | 49 | 0 | 0 |
| Clopyralid | ug/l | 0.1 | <0.009 | 0.01 | 0.013 | 48 | 0 | 0 |
| 2,4-D | ug/l | 0.1 | <0.003 | <0.004 | <0.004 | 48 | 0 | 0 |
| Dicamba | ug/l | 0.1 | <0.007 | <0.007 | <0.007 | 48 | 0 | 0 |
| Dichlorprop | ug/l | 0.1 | <0.002 | <0.004 | <0.004 | 48 | 0 | 0 |
| Diuron | ug/l | 0.1 | <0.003 | 0.003 | 0.01 | 49 | 0 | 0 |
| Fluroxypyr | ug/l | 0.1 | <0.003 | <0.006 | <0.006 | 48 | 0 | 0 |
| Isoproturon | ug/l | 0.1 | <0.004 | <0.004 | <0.004 | 49 | 0 | 0 |
| Ioxynil | ug/l | 0.1 | <0.002 | <0.005 | <0.005 | 48 | 0 | 0 |
| Linuron | ug/l | 0.1 | <0.004 | <0.004 | <0.004 | 49 | 0 | 0 |
| Mecoprop | ug/l | 0.1 | <0.003 | <0.007 | <0.008 | 48 | 0 | 0 |
| MCPA | ug/l | 0.1 | <0.002 | <0.006 | <0.006 | 48 | 0 | 0 |
| MCPB | ug/l | 0.1 | <0.004 | <0.005 | <0.008 | 48 | 0 | 0 |
| Pentachlorophenol | ug/l | 0.1 | <0.002 | <0.004 | <0.004 | 48 | 0 | 0 |
| Propazine | ug/l | 0.1 | <0.002 | <0.002 | <0.002 | 48 | 0 | 0 |
| Prometryn | ug/l | 0.1 | <0.002 | <0.002 | <0.002 | 48 | 0 | 0 |
| Propyzamide | ug/l | 0.1 | <0.004 | 0.005 | 0.011 | 49 | 0 | 0 |
| Simazine | ug/l | 0.1 | <0.005 | 0.005 | 0.007 | 49 | 0 | 0 |
| 2,4,5-T | ug/l | 0.1 | <0.003 | <0.005 | <0.005 | 48 | 0 | 0 |
| Terbutryn | ug/l | 0.1 | <0.003 | <0.003 | <0.003 | 48 | 0 | 0 |
| 2,4-DB | ug/l | 0.1 | <0.004 | <0.005 | <0.005 | 48 | 0 | 0 |
| Fenoprop | ug/l | 0.1 | <0.003 | <0.004 | <0.004 | 48 | 0 | 0 |
| Monuron | ug/l | 0.1 | <0.003 | <0.003 | <0.003 | 49 | 0 | 0 |
| Picloram | ug/l | 0.1 | <0.005 | <0.008 | <0.008 | 48 | 0 | 0 |
| Triclopyr | ug/l | 0.1 | <0.003 | <0.005 | <0.005 | 48 | 0 | 0 |
| Tebuthiuron | ug/l | 0.1 | <0.002 | <0.002 | <0.002 | 48 | 0 | 0 |
| Ametryne | ug/l | 0.1 | <0.002 | <0.002 | <0.002 | 48 | 0 | 0 |
| Carbendazim | ug/l | 0.1 | <0.002 | 0.007 | 0.259 | 49 | 1 | 2 |
| Metaldehyde | ug/l | 0.1 | 0.025 | 0.054 | 0.138 | 49 | 6 | 12.2 |
| Metazachlor | ug/l | 0.1 | 0.002 | 0.003 | 0.015 | 42 | 0 | 0 |
| Quinmerac | ug/l | 0.1 | <0.004 | 0.007 | 0.021 | 42 | 0 | 0 |
| Total Pesticides | ug/l | 0.5 | 0.005 | 0.072 | 0.354 | 50 | 0 | 0 |
| Gross alpha activity | Bq/l | 0.1 | 0.04 | 0.043 | 0.05 | 12 | 0 | 0 |
| Gross beta activity | Bq/l | 1 | 0.08 | 0.155 | 0.18 | 12 | 0 | 0 |

NOTE: PCV = Prescribed Concentration or Value

**THAMES WATER UTILITIES**
**WATER QUALITY REPORT - 2014 DATA**

| | | | | |
|---|---|---|---|---|
| **Water Supply Zone:** | LV 2 | GOFFS OAK | **Zone No.:** | 125 |
| | | | **Population:** | 25681 |

**Time Period: 01/01/2014 to 31/12/2014**
**Date extracted: 10/04/2015**

**Commentary on Water Quality:**

Very good water quality, however six infringements to report for metaldehyde* and one infringement to report for carbendazim. Our investigations showed the infringements for metaldehyde and carbendazim were transitory at our supplying assets and not indicative of the quality of water supplied to this zone.

**NOTES:**

For some parameters, monitoring occurs at the supplying Water Treatment Works rather than the Water Supply Zone

* Metaldehyde is used by farmers to protect crops from slugs and snails. It can enter watercourses through 'run-off' from fields when rainfall occurs after slug pellets have been applied to agricultural land in the autumn.

Unlike other pesticides, metaldehyde is not easily removed from surface water by conventional treatment process, and as a result has been identified at levels which exceed the regulatory limit in treated water. These concentrations detected are well below levels that pose a risk to health.

Metaldehyde in treated water is an industry-wide issue which we are collectively working with our regulator, the Drinking Water Inspectorate, and users of metaldehyde in order to reduce the amount in water that is being treated.