Slough Utility Services Limited

Slough Utility Services Limited Water Quality Report - 2023

Water Supply Zone:	Private water Supply P885SBC/PWS/02	**Estimated Population:**	10,000 (Mainly non-residential)
Time Period: 1 Jan 2023 to 31 Dec 2023			

This report is based on the entire supply zone and is not specific to any individual property.

Contents:

1. Annual review Page 1
2. Notes Page 1
3. Parameter Levels Page 2
4. Understanding your water quality report Page 4
5. Glossary of parameters Page 5

Annual review:
Very good water quality, however there were three infringements to report for iron. Our investigation showed these infringements were transitory (due to disturbances of the network by the many building works being undertaken in the area) and did not indicate a hazard to the quality of water supplied to this zone.

In September 2023 the third annual systematic flushing programme of the network was carried out. The specialist contractor undertaking these works reported minimal accumulations of sediment since the previous year.

Notes:
• We don't add fluoride to the drinking water supply, but there is naturally occurring fluoride present in all drinking water supplied by Slough Utility Services Limited. The average fluoride concentration for the area in 2023 was 0.17 milligrams per litre (legal limit is 1.5 milligrams per litre).
• The average chlorine concentration for the area in 2023 was 0.34 milligrams per litre. Please note the drinking water supplied by Slough Utility Services Limited is chlorinated.

Please refer to Glossary for explanation of the parameter(s) mentioned in report.

Time Period: 1 Jan 2023 to 31 Dec 2023				Concentration or Value (all samples)		No of Samples	
Parameter	**Units**	**Regulatory Limit**	**Min.**	**Mean**	**Max.**	**Total Tested**	**Contra-vening**
Clostridium perfringens	no./100ml	0	0	0	0	2	0
Coliform bacteria	no./100ml	0	0	0	0	2	0
Colony count 22°C	no./ml	-	0	2	96	91	0
E. coli	no./100ml	0	0	0	0	26	0
Enterococci	no./100ml	0	-	-	-	0	0
Colour (Pt/Co scale)	mg/l	20	<3.0	<3.0	<3.0	26	0
Conductivity at 20°C	uS/cm	2500	557	604	652	26	0
Hydrogen Ion	pH	6.50-	7.6	7.8	8.2	26	0
Turbidity	FTU	4	0.18	0.38	0.76	26	0
Odour (qualitative)	dilution	-	0	0	0	26	0
Taste (qualitative)	dilution	-	0	0	0	22	0
Ammonium as NH4	mg/l	0.5	0.019	0.019	0.019	86	0
Chloride as Cl	mg/l	250	49.1	53.2	57.3	2	0
Chlorine (Residual)	mg/l	-	0.11	0.34	0.51	65	0
Cyanide as CN	ug/l	50	<1.2	<1.2	<1.2	2	0
Fluoride as F	mg/l	1.5	0.16	0.17	0.18	2	0
Nitrate as NO3	mg/l	50	2.42	3.92	4.76	26	0
Nitrate/Nitrite	mg/l	1	0.05	0.08	0.1	26	0
Nitrite as NO2	mg/l	0.5	0	<0.002	<0.002	86	0
Sulphate as SO4	mg/l	250	48.9	50.4	51.9	2	0
Aluminium as Al	ug/l	200	<14.5	<14.5	<14.5	2	0
Antimony as Sb	ug/l	5	<0.07	<0.07	<0.07	2	0
Arsenic as As	ug/l	10	1.08	1.09	1.1	2	0
Boron as B	mg/l	1	0.085	0.086	0.086	2	0
Cadmium as Cd	ug/l	5	<0.03	<0.03	<0.03	2	0
Chromium as Cr	ug/l	50	0.2	0.2	0.2	2	0
Copper as Cu	mg/l	2	0.012	0.016	0.019	2	0
Iron as Fe	ug/l	200	57	120	453	86	3
Lead as Pb	ug/l	10	0.14	0.19	0.24	2	0
Manganese as Mn	ug/l	50	4.3	6.31	22.2	26	0
Mercury as Hg	ug/l	1	<0.04	<0.04	<0.04	2	0
Nickel as Ni	ug/l	20	0.3	0.3	0.3	2	0
Selenium as Se	ug/l	10	<0.32	<0.32	<0.32	2	0
Sodium as Na	mg/l	200	106	107	107	2	0
Benzo (a) pyrene	ug/l	0.01	<0.0004	<0.0004	<0.0004	2	0
PAHs (Sum of 4	ug/l	0.1	0	0	0	2	0
1,2 dichloroethane	ug/l	3	<0.16	<0.16	<0.16	2	0
Benzene	ug/l	1	<0.06	<0.06	<0.06	2	0
Tetra- & Trichloroethene	ug/l	10	0	0	0	2	0
Tetrachloromethane	ug/l	3	<0.16	<0.16	<0.16	2	0
Trihalomethanes	ug/l	100	11.71	12.56	13.4	2	0
Gross alpha activity	Bq/l	0.1	<0.027	<0.027	<0.027	2	0
Gross beta activity	Bq/l	1	0.04	0.068	0.095	2	0
Bromate as BrO3	ug/l	10	0.7	0.7	0.7	2	0

			Concentration or Value (all samples)			No of Samples	
Parameter	**Units**	**Regulatory Limit**	**Min.**	**Mean**	**Max.**	**Total Tested**	**Contra-vening**
2,4,5-T	ug/l	0.1	<0.015	<0.015	<0.015	2	0
2,4,5-TP (Fenoprop)	ug/l	0.1	<0.011	<0.011	<0.011	2	0
2,4-D	ug/l	0.1	<0.011	<0.011	<0.011	2	0
2,4-DB	ug/l	0.1	<0.011	<0.011	<0.011	2	0
2,4-DP (Dichloroprop)	ug/l	0.1	<0.01	<0.01	<0.01	2	0
Aldrin	ug/l	0.03	<0.008	<0.008	<0.008	2	0
Alpha-HCH	ug/l	0.1	<0.006	<0.006	<0.006	2	0
Bentazone	ug/l	0.1	<0.005	<0.005	<0.005	2	0
Bromoxynil	ug/l	0.1	<0.1	<0.1	<0.1	2	0
Chlorothalonil	ug/l	0.1	<0.006	<0.006	<0.006	2	0
Clopyralid	ug/l	0.1	<0.011	<0.011	<0.011	2	0
Cyproconazole	ug/l	0.1	<0.007	<0.007	<0.007	2	0
Diazinon	ug/l	0.1	<0.007	<0.007	<0.007	2	0
Dicamba	ug/l	0.1	<0.012	<0.012	<0.012	2	0
Dieldrin	ug/l	0.03	<0.009	<0.009	<0.009	2	0
Diflufenican	ug/l	0.1	<0.009	<0.009	<0.009	2	0
Fenvalerate	ug/l	0.1	-	-	-	0	0
Fluroxypyr	ug/l	0.1	<0.008	<0.008	<0.008	2	0
Flusilazole	ug/l	0.1	<0.005	<0.005	<0.005	2	0
Flutriafol	ug/l	0.1	<0.005	<0.005	<0.005	2	0
Gamma-HCH	ug/l	0.1	<0.005	<0.005	<0.005	2	0
Heptachlor	ug/l	0.03	<0.005	<0.005	<0.005	2	0
Hexachlorobenzene	ug/l	0.1	-	-	-	0	0
Ioxynil	ug/l	0.1	<0.007	<0.007	<0.007	2	0
Kresoxim-Methyl	ug/l	0.1	-	-	-	0	0
MCPA	ug/l	0.1	<0.006	<0.006	<0.006	2	0
MCPB	ug/l	0.1	<0.018	<0.018	<0.018	2	0
MCPP (Mecoprop)	ug/l	0.1	<0.009	<0.009	<0.009	2	0
Methoxychlor	ug/l	0.1	<0.007	<0.007	<0.007	2	0
op-DDE	ug/l	0.1	<0.005	<0.005	<0.005	2	0
op-DDT	ug/l	0.1	<0.004	<0.004	<0.004	2	0
Pendimethalin	ug/l	0.1	<0.009	<0.009	<0.009	2	0
Pentachlorophenol	ug/l	0.1	<0.009	<0.009	<0.009	2	0
Permethrin, Total	ug/l	0.1	<0.006	<0.006	<0.006	1	0
Picloram	ug/l	0.1	<0.016	<0.016	<0.016	2	0
pp-DDT	ug/l	0.1	<0.004	<0.004	<0.004	2	0
Tebuconazole	ug/l	0.1	<0.005	<0.005	<0.005	2	0
Triclopyr	ug/l	0.1	<0.016	<0.016	<0.016	2	0
Total Pesticides	ug/l	0.5	0	0	0	2	0

Key

no./ml	Number per millilitre
no./100ml	Number of units per 100 millilitres
ug/l	Microgram per litre or parts per billion
mg/l	Milligram per litre or parts per million
FTU	Formazin Turbidity Unit
Bq/l	Becquerel per litre
uS/cm	Micro Siemens per centimetre
pH	potential Hydrogen (pH is the acid/alkaline balance)
dilution no.	Dilution number
<	Below the limit of detection of our analysis

Understanding your water quality report:

Report identification	The heading of the report tells you: • The Water Supply Zone or area covered by the report • The estimated population of the zone • The period of time in which data was collected
Parameter	This column lists all the parameters we test for. A parameter can be : • An organism (such as Coliforms or Colony Count) • A substance (such as Lead or Nitrate) • A physical property (such as pH or Colour)
Units	The unit of measurement each parameter is recorded in. Most are measured as mg/l (milligrams per litre) or ug/l (micrograms per litre). One mg/l is one part in every million parts of water; one ug/l is one part in every billion parts of water.
Regulatory Limit	This column shows the maximum amount of each parameter permitted in drinking water under UK regulations (N/A indicates there is No Regulatory Limit).
Concentration or value	For each parameter results are shown in three ways: • Min(imum), the lowest result during the period • Mean, the average of the results • Max(imum), the highest result during the period. A '<' symbol means a result was less than the value at which a parameter can be detected. A '>' symbol means a result was greater than the range within which a parameter is normally detected.
Number of samples	Total taken – is the number of samples tested for each parameter. Contravening – shows the number of samples that exceeded the Regulatory Limit.
Annual review	On the first page of the report is an annual review, this covers any actions taken to investigate breaches of drinking water standards, and/or actions that we are carrying out to ensure compliance with standards in the future.
Glossary	The glossary (below), covers the range of parameters that are sampled within the Slough Utilities Services Ltd private water Network.

Glossary:
Chemical parameters/ Micro - organisms/ Non regulatory parameters/ Pesticides

Parameter	Water Quality Standard	Explanation
1,2-Dichloroethane	3 micrograms per litre	1,2-Dichloroethane is found in industrial solvents and can be detected in trace amounts in some source waters. Can contaminate and persist in groundwater.
Aluminium	200 micrograms per litre	Aluminium occurs naturally in some surface and ground-waters. At some treatment works (not Slough Utilities Services Ltd) aluminium salts are used to remove impurities.
Ammonia	0.5 milligrams per litre	Ammonia is a component of fertilizers and may be washed into rivers by rain. Ammonia is converted to nitrate and nitrite during the treatment process. Ammonia at levels greater than 1.0 milligrams per litre are associated with faecal contamination.
Antimony	5 micrograms per litre	Antimony is rarely found in water and when this does occur it is likely to be due to the water being in contact with brass fittings or lead-free solder.
Arsenic	10 micrograms per litre	Arsenic can be present naturally in some ground waters, but it can also be introduced into water from industrial effluent or the use of some types of sheep dips.
Benzene	1 microgram per litre	Benzene contamination can occur where petrol/diesel etc permeate plastic distribution and domestic plumbing pipes.
Benzo (a) pyrene	0.010 micrograms per litre	Benzo (a) pyrene can be found in some drinking water where coal tar lining of mains was historically practiced to prevent corrosion.
Boron	1 milligram per litre	Boron occurs naturally at low levels in all water. Some industrial discharge and detergents can increase the concentrations in river water. Slough Utilities Services Ltd does not use river water.
Bromate	10 micrograms per litre	Bromate is formed during the disinfection of drinking water through the reaction with natural bromide. It can also occasionally be detected in water through industrial pollution. Slough Utilities Services Ltd uses ULB (Ultra Low Bromate) Grade disinfectant.
Cadmium	5 micrograms per litre	Cadmium occurs in a small number of ground water sources. It can also leach from galvanised pipes and some domestic plumbing fittings (e.g. plated taps). It can also be released to the environment in wastewater from a variety of industrial processes.
Chloride	250 milligrams per litre	Occurs naturally in water sources and is derived through contact with rocks.
Chlorine (free and total)	No limits - Results are displayed as milligrams per litre.	Chlorine is used as a disinfectant to ensure that the water is free from harmful bacteria. The remaining 'free chlorine' ensures the water stays safe as it passes through our distribution system to your home. Actions to avoid high levels in supply are taken in order to minimize associated taste and odours.
Chromium	50 micrograms per litre	Chromium is very rarely found in drinking water. It can leach from some domestic plumbing fittings (e.g. chrome-plated plastic taps). Can also occur as contamination from industrial activities.
Clostridium perfringens	0 per 100 millilitres	*Clostridium perfringens* is a bacterium that can produce spores which can persist in the environment for long periods of time. Their presence in water can indicate historic contamination.
Coliforms ***E. coli*** ***Enterococci***	0 per 100 millilitres	*E. coli* and enterococci are associated with the presence of faeces. Coliforms are common environmental bacteria. Disinfection during treatment removes these bacteria from water supplies. These bacteria have the ability to flourish in the household/office environment through contact with the tap and your hands, food or dishcloths. Many instances of coliforms in samples taken from customers' taps are due to contamination of the tap, particularly from the kitchen sink. The kitchen tap should be cleaned regularly with a household disinfectant to maintain cleanliness.
Colony Counts	No abnormal change. Results are displayed as per millilitre.	Low levels of harmless bacteria may be present in the water supply since water supplies are disinfected and not sterilized; They are monitored over time to give an indication as to the hygienic state of an internal plumbing system and the drinking water supply.
Colour	Hazen units	Drinking water should be clear and bright. Disturbances to iron deposits from iron mains can cause brown and yellow discolouration. Allow sediment to settle by not drawing water for half an hour.
Conductivity	2500 micro siemens per centimetre	A measure of the amount of dissolved minerals naturally present in the water.
Copper	2 milligrams per litre	Copper is not found in water at source but may be dissolved from customers internal pipework. Copper can cause black or green

		staining to limescale, for example, in the kettle or around the tap. Excess copper can cause a metallic taste to the water.
Cryptosporidium	Less than 1 oocyst per 10 litres	*Cryptosporidium* is a microscopic parasite that can cause gastroenteritis. It produces oocysts that can find their way into water. Careful control of treatment processes are required to protect public health. Continuous monitoring is undertaken at treatment works that have been identified as being at risk. Slough Utilities Services Ltd water is drawn from deep boreholes and is considered to be a low risk.
Cyanide	50 micrograms per litre	Cyanide is very rarely found in drinking water. Possible contamination from industry (e.g. metal finishing, wood preservatives).
Enterococci	0 per 100 millilitres	Enterococci may relate to contamination of raw waters from sewage, sewage effluents and animal waste.
Fluoride	1.5 milligrams per litre	Fluoride occurs naturally in many water sources. Some water companies add fluoride to the water supply at the request of health authorities to protect against tooth decay. This is not undertaken in Slough Utilities Services Ltd.
Iron	200 micrograms per litre	Iron occurs naturally in some water and may be associated with corrosion of old iron water mains. The standard for iron has been set for aesthetic reasons as levels persistently above the standard can give rise to discoloured water. Excess iron at levels which the customer would find aesthetically acceptable are not considered to be harmful to health.
Lead	25 micrograms per litre	Lead is present naturally in some groundwaters. Lead can be found in some drinking water due to pick up from lead pipes and fittings.
Manganese	No limits - Results are displayed as milligrams per litre.	Manganese occurs naturally in water. It can form black tealeaf like particles in the drinking water supply.
Mercury	1 microgram per litre	Mercury is very rarely found in drinking water. Contamination can occur from sources such as mercury thermometers, broken UV lamps and float valves.
Nickel	20 micrograms per litre	Nickel in drinking water is normally associated with leaching from some domestic plumbing fittings (e.g. plated taps).
Nitrate	50 milligrams per litre	Nitrate contamination of source water may be associated with fertilisers, animal wastes or sewage effluents.
Nitrate/Nitrite calculation	<=1	Nitrate/nitrite is a measure of the combined concentrations of these two compounds in drinking water.
Nitrite	0.50 milligrams per litre	Nitrite occurs naturally at low levels in some waters. It is sometimes produced as a by-product of disinfection.
Pesticides	0.03 micrograms per litre for aldrin, dieldrin, heptachlor (and heptachlor epoxide). 0.1 micrograms per litre for other individual pesticides. 0.5 micrograms per litre for the total of all pesticides detected.	Pesticides are a diverse group of organic compounds that include herbicides, insecticides and fungicides. Contamination can occur from sources such as agriculture, forestry, roads, railways etc.
pH value	6.5 – 9.5	A measure of the acidity or alkalinity of the water. Drinking water in the Slough Utilities Services Ltd network is typically between 6.5 - 8.5.
Phenols	No limits - Results are displayed as micrograms per litre.	Phenols are a group of chemical compounds which can cause a TCP-like taste in water. This taste can be caused by chlorine in tap water reacting with particular substances/materials used in internal plumbing systems (for example tap washers, plastic kettles, washing machines, dishwashers, connection hoses and plastic pipework).
Polycyclic aromatic hydrocarbons (PAHs)	0.1 micrograms per litre	PAHs can be found in drinking water where coal tar lining of mains was historically practiced to prevent corrosion. The standard is a measure of benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)perylene and indeno(1,2,3-cd)pyrene.
Selenium	10 micrograms per litre	Selenium is very rarely found in drinking water
Sodium	200 milligrams per litre	Sodium is naturally present in many water sources. Some sodium is also introduced by sodium hypochlorite for disinfection. Domestic water softeners can increase the sodium concentration.
Sulphate	250 milligrams per litre	Sulphate is naturally present in many water sources.
Taste and odour	-	Taste and odour is a measure of the aesthetic quality of drinking water.

Tetrachloroethane & trichloroethane	10 micrograms per litre	These are solvents which are very occasionally found in water sources contaminated by the use of these volatile solvents in dry cleaning and metal finishing. The standard is a measure of the combined concentrations.
Tetrachloromethane	3 micrograms per litre	Tetrachloromethane is a solvent which is very occasionally found in water sources contaminated by the use of this volatile solvent in metal finishing and other industries.
Trihalomethanes total (THMs)	100 micrograms per litre	THMs are formed by the reaction of chlorine with natural organic substances in water. The standard is a measure of chloroform, bromoform, dibromochloromethane and bromodichloromethane.
Turbidity	4 FTU	Turbidity is caused by fine particles suspended in the water causing cloudiness. Turbid appearances are usually short lived and there are no health implications.

Further information can be sourced from the Drinking Water Inspectorate (DWI) website; dwi.defra.gov.uk